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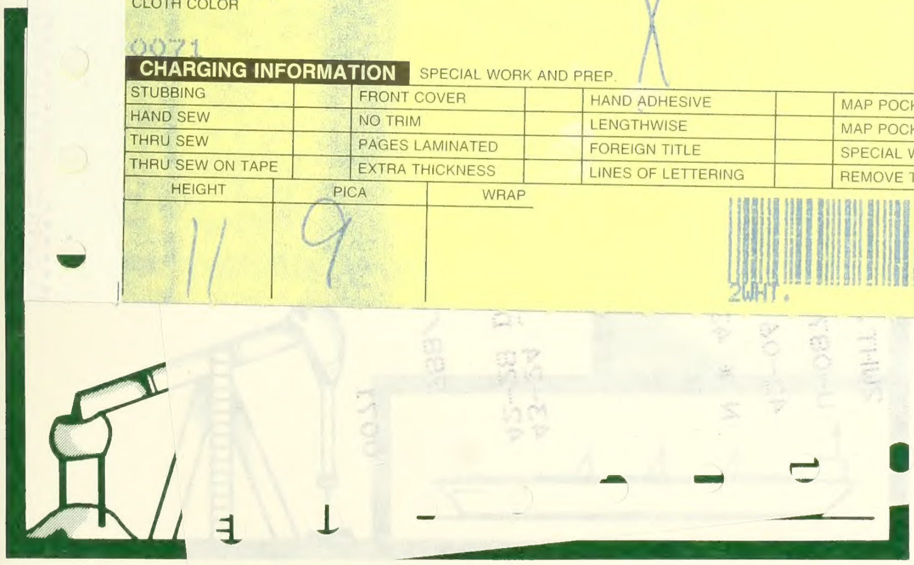

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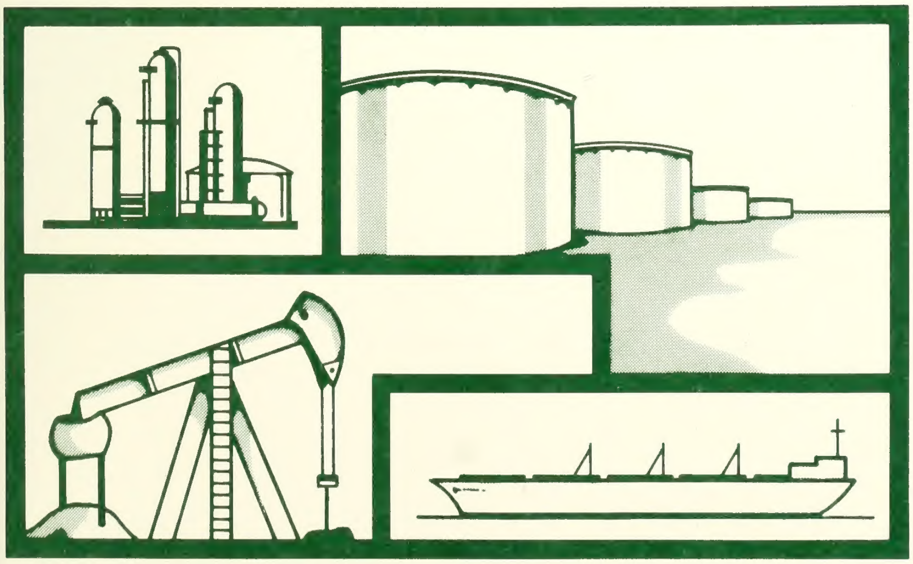
# Petroleum Supply Monthly

July 1988



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# Petroleum Supply Monthly

## July 1988

**Energy Information Administration**
Office of Oil and Gas
U.S. Department of Energy
Washington, DC 20585

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| Motor Gasoline Outlook for Summer 1985 | February 1985 |
| Refinery Capacity Trends and Outlook | March 1985 |
| Mid-Year Petroleum Review | May 1985 |
| Timeliness and Accuracy of Petroleum Supply Data | June 1985 |
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| U.S. Petroleum Import/Export Trends Through 1987 | January 1988 |
| Motor Gasoline Trends Through 1987 | February 1988 |

# Distillate Fuel Oil Outlook: Winter 1988/1989

*by Diana House*

Consumption of distillate fuel oil during the winter heating season (October 1988 through March 1989) is projected to average 3.4 million barrels per day. This increase of 1.5 percent over the 3.3 million barrels per day consumed during last year's heating season is the base case projection of the July 1988 *Short-Term Energy Outlook* (STEO). The projected retail price of No. 2 heating oil, 80 cents per gallon, is a reduction from the comparable price last year of 84 cents per gallon. This reduction is not expected to have a significant impact on consumption levels.

Distillate stock levels at the end of July 1988 are estimated to be 119 million barrels, about 4 percent higher than stock levels at the end of July 1987. Distillate inventories at the end of 1988 are expected to reach 141.6 million barrels (compared with last year's inventory of 134.5 million barrels), dropping back to about 97.8 million barrels by the end of the heating season. This projection assumes normal winter weather, and contrasts with a drop to 89.3 million barrels at the end of the colder-than-usual 1987/1988 winter.

The STEO base case projections for the two quarters which comprise the 1988/1989 heating season assume the following: (1) normal winter weather, (2) quarterly average refiner acquisition costs of $16.00 and $17.00 for crude oil, with a continued excess supply of crude oil available, (3) quarterly average retail heating oil prices of 78 and 82 cents per gallon, and (4) industrial production index levels of 1.43 and 1.45 for manufacturing, which represent a 3.8 and 3.6 percent increase over the corresponding 1987/1988 winter quarters.

Domestic refiners are projected to produce about 2.95 million barrels per day, or 87 percent of the projected supply of 3.38 million barrels during the 1988/1989 heating season. In the previous heating season, domestic refiners produced about 88 percent of the 3.33 million barrels per day supplied, or 2.92 million barrels daily.

About 37 percent of the crude oil input to domestic refineries came from imports (excluding imports to the Strategic Petroleum Reserve) during winter 1987/1988, while about 39 percent is projected to come from imports during the 1988/1989 heating season.

Net imports of distillate provided about 210,000 barrels per day, or 6 percent of the distillate fuel oil supplied during the winter of 1987/1988, and are projected to provide about 230,000 barrels per day or 7 percent of the 1988/1989 heating season supply. The principal sources of imported distillate fuel oil in 1987 and in the first 6 months of 1988 are Venezuela, Canada, and the Virgin Islands.

In addition to domestic production and imports of distillate fuel oil, stock withdrawals are expected to provide about 6 percent of the distillate consumed during the 1988/1989 heating season.

Distillate fuel oil supply for the first 7 months of 1988 averaged 3.1 million barrels per day, up 100,000 barrels per day from 1987. Domestic distillate production for the first 7 months of 1988 is estimated to be 2.9 million barrels per day, up from 2.6 million for the same period in 1987 and 2.7 million for the same period in 1986. Refinery utilization for the first 7 months of 1988 averaged 84.3 percent, with an operable crude oil distillation capacity of 15.9 million barrels per day. Comparable 1987 figures were 82.3 percent utilization of crude distillation capacity of 15.6 million barrels per day.

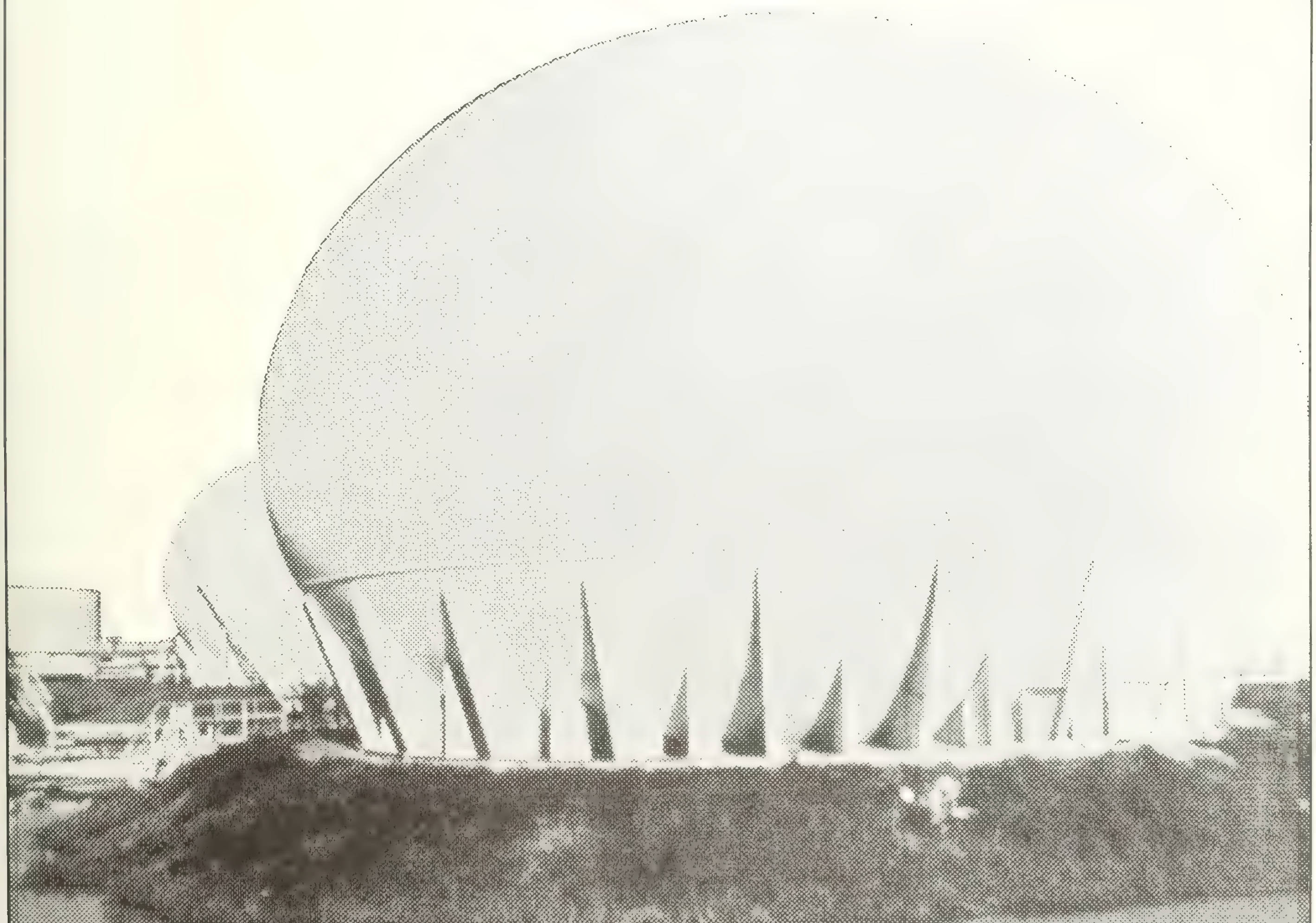
This article is based on data contained in the following Energy Information Administration publications: *Short-Term Energy Outlook*, July 1988, DOE/EIA-0202 (88/3Q); *Petroleum Supply Annual 1987*, Vols. 1 and 2, DOE/EIA-0340(87/1) and (87/2); and *Petroleum Supply Monthly*, July 1988, DOE/EIA-0109(88/07).

**Table FE1. Quarterly U.S. Distillate Fuel Oil Supply and Demand**
(Million Barrels per Day, Except Where Noted)

| | Historical | | | | Projections | | | |
|---|---|---|---|---|---|---|---|---|
| | 1987 | | 1988 | | | | 1989 | |
| | 3rd | 4th | 1st | 2nd | 3rd | 4th | 1st | 2nd |
| | | Heating Season (1987/1988) | | | | Heating Season (1988/1989) | | |
| Production | 2.72 | 3.02 | 2.81 | 2.89 | 2.89 | 3.04 | 2.86 | 2.90 |
| Net Imports | 0.23 | 0.20 | 0.22 | 0.13 | 0.13 | 0.30 | 0.16 | 0.18 |
| Product Supplied | 2.70 | 3.14 | 3.52 | 2.77 | 2.79 | 3.25 | 3.51 | 3.00 |
| Ending Stocks (million barrels) | 126.80 | 134.50 | 89.30 | 112.20 | 133.30 | 141.60 | 97.80 | 105.80 |

Source: Energy Information Administration, *Short-Term Energy Outlook*, DOE/EIA-0202(88/3Q), (July 1988) Table 11.

# Highlights



# Highlights

Total U.S. demand for petroleum products (as measured by product supplied) averaged 16.6 million barrels per day in July 1988, nearly 0.5 million barrels per day below the average for June 1988 and 0.6 million barrels per day below the average for July 1987. A combined drop of more than 0.5 million barrels per day in motor gasoline and distillate fuel oil demand accounts for the decline in total product supplied.

Other highlights include the following:

- Total product stocks increased 24.4 million barrels in July to 726.0 million barrels.
- Stocks of crude oil (excluding SPR) dropped 9.7 million barrels to 349.3 million barrels.
- U. S. refinery utilization rate increased in July for the fifth consecutive month. The utilization rate increased from 86.0 percent in June to 86.5 percent in July.
- Low water levels along the Mississippi River and its tributaries caused by drought conditions in the region had no discernable impact on the movement of petroleum by barge between PAD Districts.

## Product Supplied

Motor gasoline demand in June 1988 showed an unusually large increase of 0.6 million barrels per day. This was followed by a decrease in July of almost 0.4 million barrels per day, down to 7.5 million barrels per day(Table H1). An increase in production of almost 0.2 million barrels per day contributed to the 0.1 million-barrel-per-day increase in stocks. For the first 7 months of 1988, motor gasoline demand averaged 7.3 million barrels per day, 1.4 percent above the demand for the comparable period of 1987. This increase is largely due to an increase in highway travel of almost 4 percent.

Demand for distillate fuel oil dropped 0.2 million barrels per day below the June level, to 2.6 million barrels per day in July. PAD District I accounted for 70 percent of the decrease. While distillate fuel oil demand in July was 2.4 percent lower than the demand in July 1987, demand for the first 7 months of 1988 of 3.1 million barrels per day was 3.4 percent higher than for the comparable 1987 period. Increased diesel use by the transportation sector in relation to the strengthening economy in 1988 accounted for much of the increase in distillate fuel oil demand through July 1988.

Residual fuel oil demand increased nearly 0.1 million barrels per day in July to 1.2 million barrels per day. Higher demand for heavy fuel oil at utilities brought on by the unusually hot and dry weather throughout most of the nation contributed to the increase in residual fuel oil demand in July. Even with this increase, however, July's residual fuel oil demand was 12.1 percent below its level a year ago. Continued switching from heavy fuel oil to natural gas in some industrial and utility markets helped to moderate residual fuel oil demand from January through July 1988 at 1.3 million barrels per day, even with the level for the first 7 months of 1987.

## Product Stocks

Total ending stocks of petroleum products rose 24.4 million barrels in July to 726.0 million barrels. LPG and distillate fuel oil stocks experienced the biggest increases and together accounted for 85 percent of the increase. LPG stocks jumped 11.9 million barrels in July to 111.9 million barrels at the end of the month. Most of the increase occurred in propane stocks (6.8 million barrels) and normal butane stocks (4.6 million

## Table H1. Petroleum Supply Summary, July 1988
(Million Barrels per Day, Except Where Noted)

| Category | 1988 | | | 1987 | Cumulative January Through July | |
|---|---|---|---|---|---|---|
| | July | June | Difference[1] | July | 1988 | 1987 |
| **Products Supplied** | **16.6** | **17.1** | **-0.5** | **17.1** | **16.9** | **16.6** |
| Finished Motor Gasoline | 7.5 | 7.8 | -0.4 | 7.6 | 7.3 | 7.2 |
| Distillate Fuel Oil | 2.6 | 2.8 | -0.2 | 2.7 | 3.1 | 3.0 |
| Residual Fuel Oil | 1.2 | 1.1 | 0.1 | 1.3 | 1.3 | 1.3 |
| Liquefied Petroleum Gases | 1.4 | 1.3 | 0.1 | 1.5 | 1.6 | 1.6 |
| Other Petroleum Products[2] | 3.8 | 3.9 | -0.1 | 3.9 | 3.6 | 3.5 |
| Crude Oil | (s) | (s) | (s) | (s) | (s) | (s) |
| **Crude Oil Inputs** | **13.7** | **13.5** | **0.1** | **13.4** | **13.2** | **12.7** |
| **Refinery Utilization (percent)** | **86.5** | **86.0** | **0.5** | **86.7** | **84.2** | **82.3** |
| **Imports** | **7.0** | **6.9** | **0.1** | **7.6** | **7.0** | **6.4** |
| **Crude Oil** | **5.0** | **5.1** | **(s)** | **5.3** | **4.9** | **4.4** |
| SPR | (s) | 0.1 | (s) | 0.1 | 0.1 | 0.1 |
| Other | 5.0 | 5.0 | (s) | 5.2 | 4.9 | 4.3 |
| **Products** | **2.0** | **1.8** | **0.2** | **2.3** | **2.0** | **2.0** |
| Finished Motor Gasoline | 0.5 | 0.4 | (s) | 0.5 | 0.4 | 0.4 |
| Distillate Fuel Oil | 0.2 | 0.2 | (s) | 0.4 | 0.3 | 0.3 |
| Residual Fuel Oil | 0.4 | 0.3 | 0.1 | 0.7 | 0.5 | 0.6 |
| Liquefied Petroleum Gases | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 |
| Other Petroleum Products[2] | 0.7 | 0.7 | -0.1 | 0.5 | 0.7 | 0.6 |
| **Exports** | **0.8** | **0.9** | **-0.1** | **0.7** | **0.8** | **0.8** |
| Crude Oil | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 |
| Products | 0.6 | 0.8 | -0.2 | 0.5 | 0.7 | 0.6 |
| **Total Net Imports** | **6.2** | **5.9** | **0.2** | **6.9** | **6.1** | **5.6** |
| **Stock Change[3]** | **0.5** | **(s)** | **0.5** | **0.3** | **0.1** | **-0.2** |
| Crude Oil | -0.3 | 0.1 | -0.4 | (s) | 0.1 | 0.1 |
| Products | 0.8 | -0.1 | 0.9 | 0.4 | (s) | -0.2 |
| **Stocks at End of Period (Million Barrels)** | | | | | | |
| **Crude Oil** | **900.7** | **909.1** | **-8.4** | **853.8** | **--** | **--** |
| SPR | 551.3 | 550.1 | 1.3 | 530.0 | -- | -- |
| Other | 349.3 | 359.0 | -9.7 | 323.8 | -- | -- |
| **Products** | **726.0** | **701.6** | **24.4** | **704.7** | **--** | **--** |
| Finished Motor Gasoline | 177.9 | 173.8 | 4.2 | 188.9 | -- | -- |
| Distillate Fuel Oil | 119.4 | 110.7 | 8.8 | 114.6 | -- | -- |
| Residual Fuel Oil | 41.1 | 42.1 | -1.1 | 44.7 | -- | -- |
| Liquefied Petroleum Gases | 111.9 | 100.0 | 11.9 | 103.9 | -- | -- |
| Other Petroleum Products[2] | 275.7 | 275.0 | 0.6 | 252.6 | -- | -- |
| **Total Crude Oil and Products** | **1,626.7** | **1,610.6** | **16.1** | **1,558.5** | **--** | **--** |

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[1] Difference is equal to volume for current month minus volume for previous month.

[2] Includes pentanes plus, other hydrocarbons and alcohol, unfinished oils, gasoline blending components, and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil, and liquefied petroleum gases.

[3] A negative number indicates a decrease in stocks and a positive number indicates an increase.

(s) = Less than 0.05 million barrels or less than 0.05 percent.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration: *Petroleum Supply Annual*, 1987 (June 1988). Appropiate issues of *Petroleum Supply Monthly* . (See Explanatory Notes 9.1 through 9.6.)

barrels). Distillate fuel oil stocks continued to climb in July for the fourth consecutive month. From 110.7 million barrels at the end of June, distillate stocks rose 8.8 million barrels to 119.4 million barrels at the end of July. Seasonal factors are largely responsible for the increases in both LPG and distillate stocks.

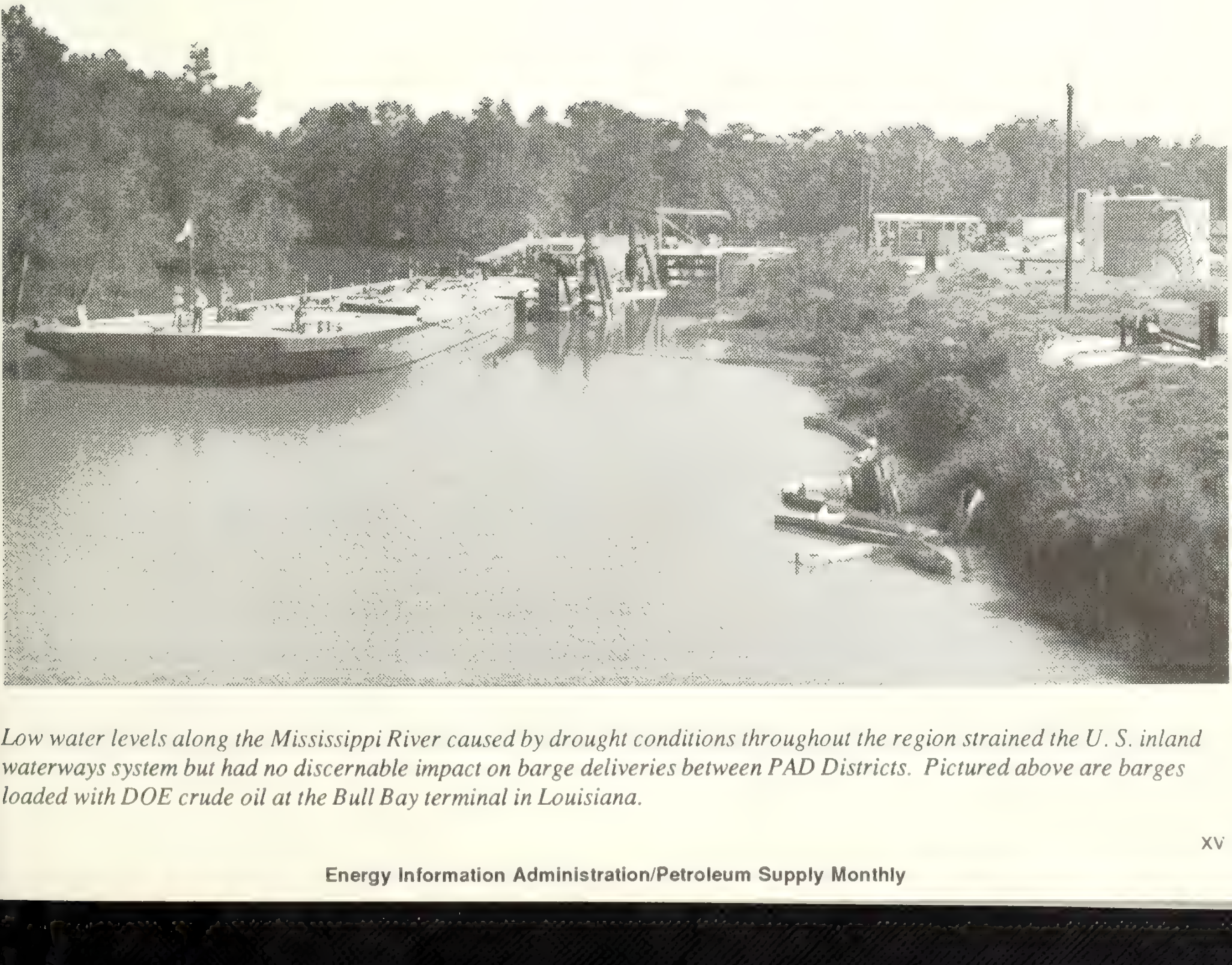
## Crude Oil

Crude oil stocks (excluding SPR) declined in July for the first time since January 1988. From 359.0 million barrels at the end of June, crude oil stocks decreased 9.7 million barrels by the end of July to 349.3 million barrels. Nevertheless, crude oil stocks at the end of July 1988 were 25.6 million barrels higher than the level at the end of July 1987.

The level of crude oil imports (excluding SPR) changed marginally in July, averaging 5.0 million barrels per day.

## Refinery Utilization

U.S. refinery utilization increased in July for the fifth consecutive month. From a rate of 86.0 percent in June, utilization climbed to 86.5 percent in July, primarily because of an increase of 0.1 million barrels per day in gross inputs to crude oil distillation units. Gross inputs to crude oil distillation units averaged 13.8 million barrels per day in July, while operable capacity stood at nearly 16.0 million barrels per day. Downstream activity also rose this month. Inputs of fresh feed to catalytic cracking, catalytic hydrocracking, and coking units averaged over 7.0 million barrels per day, an increase of more than 0.2 million barrels per day from the June level.



*Low water levels along the Mississippi River caused by drought conditions throughout the region strained the U. S. inland waterways system but had no discernable impact on barge deliveries between PAD Districts. Pictured above are barges loaded with DOE crude oil at the Bull Bay terminal in Louisiana.*

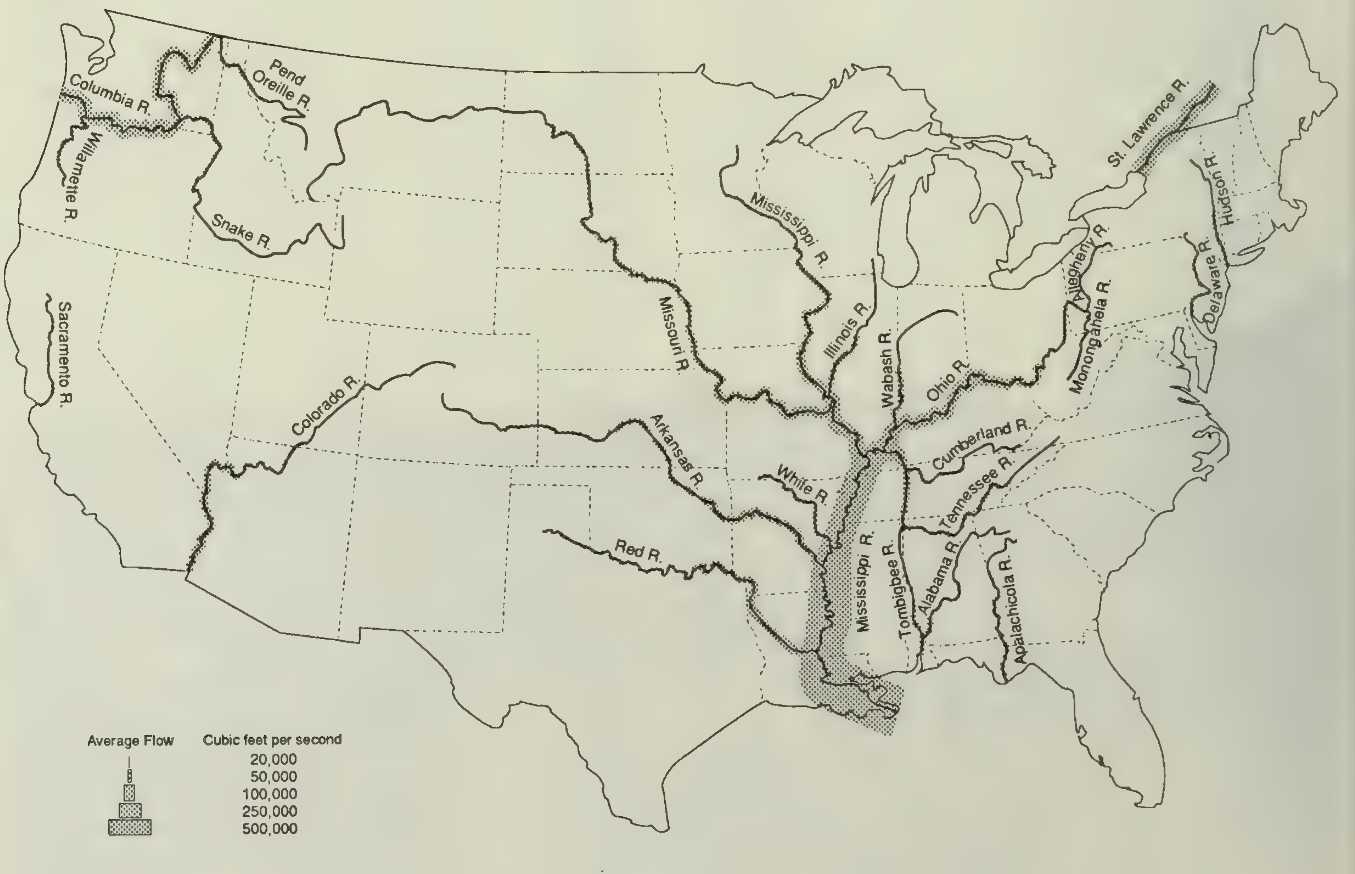
# Effects of the Summer 1988 Drought

The drought that blanketed much of the United States this summer has tested the vulnerability of the U.S. waterway system for transporting petroleum and other products, especially along the Mississippi River system. Extremely low water levels in June and July threatened to disrupt the supply and distribution system for petroleum products normally transported along the Mississippi River. Severe traffic disruptions and salt water intrusion into the lower river created logistical problems for refiners, shippers, and distributors.

# The Mississippi River System

The Mississippi River and its tributaries depend on watersheds from areas covering two-thirds of the Nation (Figure H1). The effects of the drought were felt over most of these areas during the summer of 1988. The 2,350-mile-long Mississippi River carries the largest quantity of water of any river

**Figure H1. Flows of Large U.S. Rivers**



Sources: Water Information Center, Inc., *Water Atlas of the United States,* 1973 Edition, Plate 23; U.S. Army Corps of Engineers, *Tennessee-Tombigbee Waterway,* June 1985.

in the country, with an average water flow into the Gulf of Mexico of around 620,000 cubic feet per second (cfs).[1] (A cubic foot of water is equal to 7.5 gallons.) In the midst of the drought on July 5, 1988, the flow rate of the Mississippi River averaged 111,000 cfs of water at a point south of Vicksburg, Mississippi. This was only one-fourth of the average historical July 5th flow rate of 454,000 cfs at that point. [2] The last time the Mississippi River was close to this low level was during the drought in the summer of 1936.

The lack of reservoirs or lock and dam systems along the Mississippi and lower Ohio Rivers makes these rivers more susceptible to the effects of long dry spells than are other river systems. Since the drought of 1936, when Mississippi River traffic experienced similar low water problems, reservoirs and dams have been developed along the upper Ohio, the Missouri, the Tennessee, and the Tombigbee Rivers. The series of reservoirs and dams kept these rivers navigable this summer. As a result, normal petroleum product deliveries by barge via the Ohio River to PAD District I were not seriously threatened. Traffic on the Tennessee-Tombigbee (Tenn-Tom) waterway increased tremendously to accommodate some of the traffic that would normally use the Mississippi River for transporting commodities from the Gulf to PAD Districts I and II. Reservoirs along the Missouri River were also used for release of 75,000 cfs of water periodically to help increase the flow of the Mississippi River during the drought.

During the period between early June and mid-July, the Mississippi River fell to its lowest depth since record keeping began in 1872. Under normal conditions, the allowable barge draft is not restricted, and often exceeds 11 feet 6 inches, though the standard draft for a loaded barge is 9 feet 6 inches. A loaded barge holds as much as 15 railroad cars, or more than 60 trucks. On June 22, 1988, the Coast Guard restricted the allowable draft to 8 feet 6 inches under the authority of the Port and Waterways Act; water levels at many points were much too low for the standard draft allowance. For some petroleum products, this meant a reduction in barge carrying capacity of about 15 percent. Under the normal draft allowance, about 90,000 barrels of unleaded motor gasoline can be transported on one barge. The Coast Guard restrictions reduced capacity to about 77,000 barrels per barge.[3]

Heavy tugboats are used to move 30 or more barges at a time along the Mississippi River under normal conditions. The number of barges per tow was reduced to a maximum of 16 to help alleviate recurring blockages at several points along the river.[4] The restrictions on draft allowance and the reduced number of barges per tow effectively doubled the normal delivery time and caused transportation costs to soar. At the same time, the restrictions allowed traffic to flow more freely. The normal 8-day trip for transporting petroleum from New Orleans to St. Louis took 16 days under these restrictions. The limitations on shipping were partially lifted after water levels on the Mississippi River rose in early September.

## Movements of Petroleum Along the Mississippi River System

Along the Mississippi and Ohio Rivers, as well as smaller rivers, barges transport primarily motor gasoline, distillate fuel oil, jet fuel, lubricants, asphalt, and residual fuel oil into midwestern and eastern States not accessible by product pipelines or tankers. Residual fuel oil and small amounts of other products are also barged to the Gulf Coast from the Midwest. Southbound traffic traditionally has the right-of-way along the Mississippi River because it is more difficult to maintain control of a tow traveling with the current at an average speed of 8 to 14 miles per hour than one traveling 5 to 7 miles per hour upstream.[5] The narrowed channels of the Mississippi River could accommodate only one-way traffic at many trouble spots during June and July. At these points, the right-of-way was alternated between upriver and downriver traffic.

While nearly all crude oil delivered to the Midwest from the Gulf Coast is transported by pipeline, barges are used to transport approximately 16 percent of the petroleum products that are moved from the Gulf Coast for consumption in PAD District II. Barges also transport petroleum products from PAD District II, via the Ohio River and smaller river systems, into parts of PAD District I that are not accessible by pipeline. One such smaller river is the Monongahela, a major route for transporting commodities from the Ohio River into West Virginia. With draft allowances reduced from 9 feet to 6.6 feet, the Monongahela River continued to be used to supply petroleum to that region during the drought.

Petroleum shipments between PAD Districts represent only about 11 percent of all petroleum barge movements on the Mississippi River. The remaining 89 percent represents transport within PAD Districts II or III. Crude oil, motor gasoline, and residual fuel oil comprise about 90 percent of the intradistrict petroleum traffic. For 1986 (the latest available data) almost 1 million barrels per day of crude oil and petroleum products were moved to various points within PAD Districts II and III via the Mississippi River.[6]

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[1] Water Information Center, Inc., *Water Atlas of the United States,* Third Edition, (Plainview, New York 1973), Plate 23.

[2] U.S. Army Corps of Engineers, Vicksburg, Mississippi, personal communication, September 8, 1988.

[3] Scott Shotin, Inc., Barge Transportation Company, New Orleans, Louisiana, personal communication, June 30, 1988.

[4] James Abbott, *Traffic World,* "Barges Move on Mississippi But Drought Reduces Tows," July 25, 1988, p. 30.

[5] Ramchandran Jaikumar and Marius M. Solomon, *Transportation Science*, " Tug Fleet Size Problem for Barge Line Operations," Vol. 21, No. 4, November 1987, p. 265

## Alternatives for Product Delivery

Major coordination efforts on the part of refiners, bulk terminal operators, and shippers prevented any major disruption in supply of petroleum products when blockages were disrupting Mississippi River traffic. Exchanges were arranged with upriver suppliers, lighter tug/barge equipment was contracted, and arrangements were made to divert products to pipelines, trucks, and railroads. The recently opened Tenn-Tom waterway was especially important for shipment of petroleum from PAD District III to PAD Districts I and II during this period.

Since the opening of the waterway between the Tennessee River and the Tombigbee River in 1985, the Tenn-Tom river system has operated as a route parallel to the Mississippi River from Illinois to the Gulf. Though much smaller than the Mississippi River, the Tenn-Tom waterway maintained a 9-foot depth throughout the drought because of its lock and dam system. The Tenn-Tom can accommodate only lighter tug/barge equipment, with a maximum 8 barges per tow. Until June 1988, when tonnage along the waterway more than doubled, approximately 440,000 short tons of cargo per month were shipped along this route in 1988. In July, shipments were 6 times the recent average.[7] Coal, chemicals, petroleum and other commodities were supplied to PAD Districts I and II through this system, alleviating some of the blockages on the Mississippi River in June and July.

Petroleum movements increased dramatically in June and July along the Tenn-Tom waterway, with asphalt shipments reaching 1.3 million barrels in July, compared with 225,000 barrels in June and very small volumes before then. Shipments of other petroleum products, including motor gasoline, distillates, jet fuel, and residual fuel oil, also increased in June and July, reaching about 561,000 barrels in July (Table H2). The Tenn-Tom system maintained unusually heavy traffic until about July 25, when the traffic situation improved for light-loaded barges on the Mississippi River.

**Table H2. Petroleum Shipments on the Tenn-Tom Waterway: January - August 1988**
(Thousand Barrels)

| Month | Asphalt | All Other Petroleum | Total Petroleum |
|---|---|---|---|
| January | 0 | 108 | 108 |
| February | 71 | 146 | 217 |
| March | 0 | 64 | 64 |
| April | 0 | 62 | 62 |
| May | 8 | 130 | 138 |
| June | 225 | 387 | 612 |
| July | 1,278 | 561 | 1,839 |
| August | 474 | 320 | 794 |

Source: U.S. Army Corps of Engineers, *Tenn-Tom Waterway Traffic by Commodity*, Historical Summary, August 1988 (September 1988).

## Salt Water Intrusion

While Mississippi River traffic was experiencing blockages, increased salinity at the lower end of the river was threatening to hamper refinery operations. Salt water from the Gulf of Mexico reached New Orleans (mile post 106) before the intrusion was stalled in mid-July by a combination of heavy rainfall and the completion of a silt wall near mile post 64 by the U.S. Army Corps of Engineers. Refineries located south of New Orleans barged in fresh water for use in boiler operations, but most refineries used river water for cooling. As of the end of August, some refineries were still barging in fresh water.

## Effect of the Jet Stream on the 1988 Drought

Summer weather systems in the United States develop largely as a result of the course of the jet stream.[8] The jet stream is a narrow band of high velocity air 20,000 to 30,000 feet above the earth that moves eastward. It separates and stirs high pressure systems to its south and low pressure systems to its north. When the jet stream splits and its course stagnates for more than a week or two, some type of extreme weather conditions occur. The unusual course of the jet stream this summer intensified the effects of the low rainfall in the United States during the past few years.

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[6] U.S. Army Corps of Engineers, *Waterborne Commerce of the United States*, Part 2, 1986, (New Orleans, Louisiana, May 1988), p. 127.
[7] U.S. Army Corps of Engineers, *Tenn-Tom Waterway Traffic by Commodity*, Historical Summary, (Mobile, Alabama, September 1988), August 1988 edition.
[8] Facts about jet stream activity were provided by Edward O'Lenic, Meteorologist, Climate Analysis Center, Washington, DC.

In mid-May the jet stream split and then stalled for about a month, with one part positioned well north of the usual spring and early summer course, and an equally strong part positioned far south of the normal path (Figure H2). This created the drought situation that blanketed much of the country through mid-August.

In late spring, the jet stream normally creates instability and storms as it moves from southern California through the midsection of the United States, and through Pennsylvania. During the late spring of 1988, the equally strong far north and far south branches of the split stream flowed around a large high-pressure area of hot, dry air that settled over the midsection of the country. Consequently, other weather systems that normally bring moisture from the Gulf of Mexico to the region were blocked.

The northern jet stream became even swifter in mid-June as it remained north of the normal position, and as the temperature differential between the hot air to the south and the cool air to the north of it increased. At the same time, the far south branch of the jet stream weakened, then disappeared.

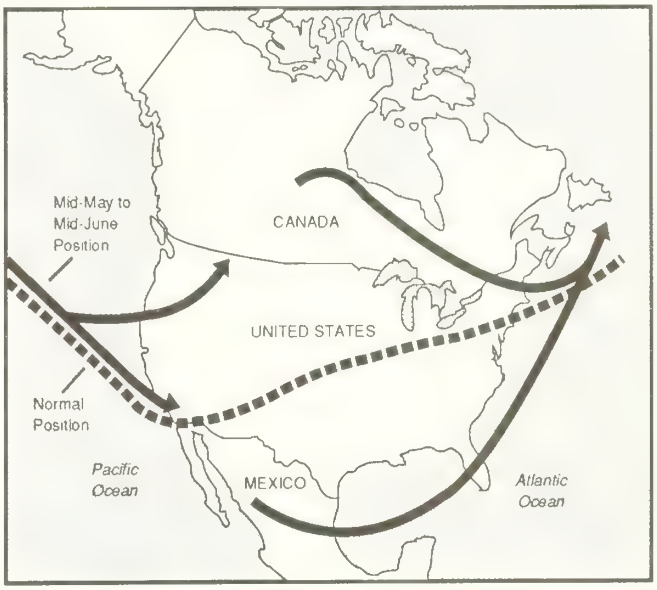
The jet stream usually moves northward from its normal spring path as the summer progresses, flowing from Northern California, through the Dakotas and through New England. This is a natural consequence of the seasonal change in the elevation of the sun, which reaches its maximum at the summer solstice on June 21 each year. During midsummer 1988, the jet stream remained over Canada instead of maintaining its normal flow across northern United States. Consequently, stormy conditions were further north than usual while very hot, dry air south of the jet stream tended to block thunderstorm activity that normally flows in from the Gulf of Mexico.

During the latter part of August, the jet stream was highly variable over the western part of North America. This kept the West and Northwest areas of the country extremely hot and dry. Cooler temperatures and near normal rainfall eased the drought situation slightly in the Mississippi and Ohio Valleys, as the jet stream in the East was south of the usual course for this time of year. Still, many areas of the Midwest remained unusually dry.

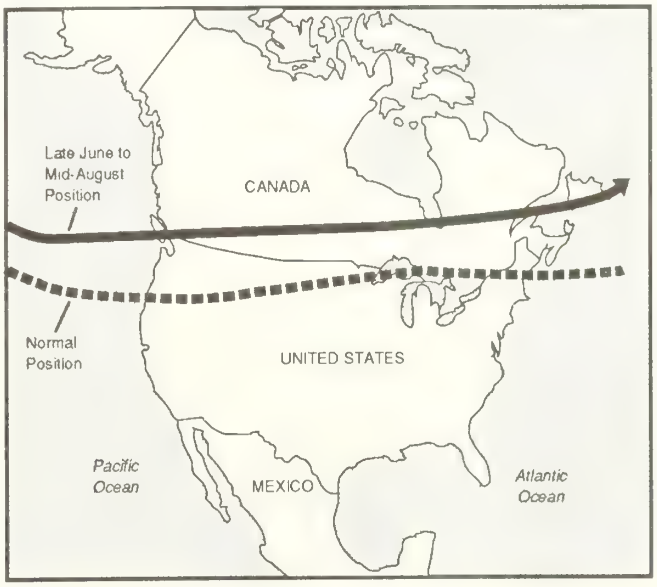
Even in years of normal precipitation, August and September are among the driest months. Consequently, the dry August that followed the earlier hot, dry weather, together with the cumulative shortage of average rainfall over the past few years, have kept water levels on the Nation's river systems below normal during the summer of 1988.[9]

**Figure H2. Average Jet Stream Paths for Summer 1988**

Mid-May to Mid-June1988



Late June to Mid-August1988



Source: National Oceanographic and Atmospheric Administration, Climate Analysis Center.

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[9] Financial Times Business Information, *Energy Economist*, "It is Not Just Farmers Who Suffer from the Drought", July 1988, p. 5.

# Summary Statistics

# Table S1. Crude Oil[1] and Petroleum Products Overview

| | Field Production | | | Stock Withdrawal[2] | | | Ending Stocks[3] |
|---|---|---|---|---|---|---|---|
| | Total Domestic[4] | Crude Oil | Natural Gas Plant Liquids | Crude Oil[5] | Petroleum Products | Petroleum Products Supplied | Crude Oil[5] and Petroleum Products |
| | Thousand Barrels per Day | | | | | | Million Barrels |
| 1973 Average | **10,975** | **9,208** | **1,738** | **11** | **-146** | **17,308** | **1,008** |
| 1974 Average | **10,498** | **8,774** | **1,688** | **-62** | **-117** | **16,653** | [8] **1,074** |
| 1975 Average | **10,045** | **8,375** | **1,633** | [8] **-17** | [8] **-15** | **16,322** | **1,133** |
| 1976 Average | **9,774** | **8,132** | **1,603** | **-39** | **96** | **17,461** | **1,112** |
| 1977 Average | **9,913** | **8,245** | **1,618** | **-170** | **-378** | **18,431** | **1,312** |
| 1978 Average | **10,328** | **8,707** | **1,567** | **-78** | **172** | **18,847** | **1,278** |
| 1979 Average | **10,179** | **8,552** | **1,584** | **-148** | **-25** | **18,513** | **1,341** |
| 1980 Average | **10,214** | **8,597** | **1,573** | **-98** | **-42** | **17,056** | [8] **1,392** |
| 1981 Average | **10,230** | **8,572** | **1,609** | [8] **-290** | [8] **130** | **16,058** | **1,484** |
| 1982 Average | **10,252** | **8,649** | **1,550** | **-136** | **283** | **15,296** | [8] **1,430** |
| 1983 Average | **10,299** | **8,688** | **1,559** | [8] **-214** | [8] **234** | **15,231** | **1,454** |
| 1984 Average | **10,554** | **8,879** | **1,630** | **-199** | **-81** | **15,726** | **1,556** |
| 1985 Average | **10,636** | **8,971** | **1,609** | **-50** | **153** | **15,726** | **1,519** |
| 1986 January | 10,911 | 9,137 | 1,711 | -383 | -151 | 16,088 | 1,535 |
| February | 10,916 | 9,173 | 1,696 | -37 | 804 | 16,186 | 1,514 |
| March | 10,664 | 9,013 | 1,604 | -345 | 1,160 | 16,276 | 1,489 |
| April | 10,435 | 8,864 | 1,523 | 41 | 262 | 15,945 | 1,479 |
| May | 10,440 | 8,838 | 1,543 | 260 | -1,109 | 15,993 | 1,506 |
| June | 10,187 | 8,623 | 1,504 | 3 | -1,238 | 16,049 | 1,543 |
| July | 10,225 | 8,660 | 1,507 | -541 | -422 | 16,307 | 1,573 |
| August | 9,875 | 8,374 | 1,445 | 242 | -551 | 16,618 | 1,582 |
| September | 9,852 | 8,328 | 1,468 | -217 | -973 | 15,909 | 1,618 |
| October | 9,954 | 8,419 | 1,477 | -233 | 476 | 16,602 | 1,610 |
| November | 10,061 | 8,412 | 1,569 | 95 | -147 | 16,221 | 1,612 |
| December | 9,985 | 8,352 | 1,571 | 186 | 443 | 17,131 | 1,593 |
| **Average** | **10,289** | **8,680** | **1,551** | **-78** | **-124** | **16,281** | -- |
| 1987 January | 10,139 | 8,480 | 1,582 | -166 | 376 | 16,684 | 1,586 |
| February | 10,073 | 8,389 | 1,618 | -22 | 831 | 16,908 | 1,563 |
| March | 10,131 | 8,464 | 1,598 | -125 | 340 | 16,165 | 1,557 |
| April | 10,139 | 8,498 | 1,590 | 50 | 532 | 16,524 | 1,539 |
| May | 9,977 | 8,336 | 1,585 | 36 | -116 | 16,026 | 1,542 |
| June | 9,906 | 8,279 | 1,578 | -165 | -42 | 16,830 | 1,548 |
| July | 9,895 | 8,251 | 1,582 | 33 | -372 | 17,113 | 1,558 |
| August | 9,843 | 8,210 | 1,571 | -345 | -737 | 16,346 | 1,592 |
| September | 9,851 | 8,205 | 1,582 | -220 | -236 | 16,670 | 1,606 |
| October | 10,037 | 8,364 | 1,602 | -661 | 523 | 16,941 | 1,610 |
| November | 10,112 | 8,397 | 1,637 | -355 | -478 | 16,343 | 1,635 |
| December | 10,001 | 8,318 | 1,621 | 405 | 482 | 17,445 | 1,607 |
| **Average** | **10,008** | **8,349** | **1,595** | **-128** | **87** | **16,665** | -- |
| 1988 January | [E] 9,874 | [E] 8,245 | 1,569 | 56 | 285 | 17,224 | 1,597 |
| February | [E] 10,016 | [E] 8,376 | 1,594 | -130 | 895 | 17,584 | 1,575 |
| March | [E] 10,044 | [E] 8,347 | 1,628 | -212 | 748 | 17,530 | 1,559 |
| April | [E] 9,935 | [E] 8,268 | 1,609 | -194 | -450 | 16,440 | 1,578 |
| May | [E] 9,881 | [E] 8,203 | 1,624 | -41 | -1,049 | 16,117 | 1,612 |
| June | [E] 9,815 | [E] 8,158 | 1,605 | -113 | 146 | 17,054 | 1,611 |
| July* | [RE] 9,728 | [RE] 8,059 | [R] 1,609 | [R] 270 | [R] -788 | [R] 16,555 | [R] 1,627 |
| August** | [PE] 9,797 | [PE] 8,147 | [E] 1,616 | [E] *535* | [E] *-322* | [E] *16,924* | [E] *1,615* |
| **8-Mo. Average** | [PE] **9,885** | [PE] **8,224** | [E] **1,607** | [E] **24** | [E] **-74** | [E] **16,925** | -- |
| **1987 8-Mo. Average** | **10,012** | **8,363** | **1,588** | **-89** | **91** | **16,570** | -- |
| **1986 8-Mo. Average** | **10,452** | **8,832** | **1,565** | **-97** | **-165** | **16,184** | -- |

[1] Includes lease condensate.

[2] A negative number indicates an increase in stocks and a positive number indicates a decrease.

[3] Stocks are totals as of end of period.

[4] Includes crude oil, natural gas plant liquids, other hydrocarbons, and alcohol.

[5] Includes stocks located in the Strategic Petroleum Reserve.

[6] Includes crude oil for storage in the Strategic Petroleum Reserve.

[7] Net Imports equal Imports minus Exports.

[8] In January 1975, 1981, and 1983, numerous respondents were added to surveys affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10.

Footnotes continued on following page.

## Table S1. Crude Oil[1] and Petroleum Products Overview (Continued)

| | Imports | | | Exports | | | |
|---|---|---|---|---|---|---|---|
| | Total | Crude Oil[6] | Petroleum Products | Total | Crude Oil | Petroleum Products | Net[7] Imports |
| | Thousand Barrels per Day | | | | | | |
| **1973 Average** | **6,256** | **3,244** | **3,012** | **231** | **2** | **229** | **6,025** |
| **1974 Average** | **6,112** | **3,477** | **2,635** | **221** | **3** | **218** | **5,892** |
| **1975 Average** | **6,056** | **4,105** | **1,951** | **209** | **6** | **204** | **5,846** |
| **1976 Average** | **7,313** | **5,287** | **2,026** | **223** | **8** | **215** | **7,090** |
| **1977 Average** | **8,807** | **6,615** | **2,193** | **243** | **50** | **193** | **8,565** |
| **1978 Average** | **8,363** | **6,356** | **2,008** | **362** | **158** | **204** | **8,002** |
| **1979 Average** | **8,456** | **6,519** | **1,937** | **472** | **235** | **237** | **7,984** |
| **1980 Average** | **6,909** | **5,263** | **1,646** | **544** | **287** | **258** | **6,365** |
| **1981 Average** | **5,996** | **4,396** | **1,599** | **595** | **228** | **367** | **5,401** |
| **1982 Average** | **5,113** | **3,488** | **1,625** | **815** | **236** | **579** | **4,298** |
| **1983 Average** | **5,051** | **3,329** | **1,722** | **739** | **164** | **575** | **4,312** |
| **1984 Average** | **5,437** | **3,426** | **2,011** | **722** | **181** | **541** | **4,715** |
| **1985 Average** | **5,067** | **3,201** | **1,866** | **781** | **204** | **577** | **4,286** |
| **1986** January | 5,573 | 3,472 | 2,101 | 859 | 159 | 700 | 4,714 |
| February | 4,676 | 2,968 | 1,709 | 876 | 162 | 715 | 3,800 |
| March | 4,712 | 2,988 | 1,724 | 732 | 212 | 520 | 3,980 |
| April | 5,439 | 3,684 | 1,755 | 850 | 94 | 756 | 4,589 |
| May | 6,400 | 4,250 | 2,150 | 724 | 98 | 625 | 5,676 |
| June | 6,848 | 4,635 | 2,213 | 642 | 240 | 401 | 6,206 |
| July | 6,942 | 4,726 | 2,216 | 685 | 65 | 620 | 6,256 |
| August | 7,168 | 4,859 | 2,309 | 868 | 233 | 635 | 6,300 |
| September | 7,090 | 5,031 | 2,059 | 714 | 161 | 553 | 6,375 |
| October | 6,427 | 4,419 | 2,008 | 831 | 151 | 680 | 5,597 |
| November | 6,592 | 4,615 | 1,977 | 821 | 115 | 706 | 5,771 |
| December | 6,700 | 4,412 | 2,288 | 820 | 159 | 661 | 5,881 |
| **Average** | **6,224** | **4,178** | **2,045** | **785** | **154** | **631** | **5,439** |
| **1987** January | 6,353 | 4,385 | 1,968 | 703 | 84 | 619 | 5,650 |
| February | 5,984 | 3,866 | 2,118 | 977 | 284 | 694 | 5,007 |
| March | 5,794 | 3,779 | 2,015 | 720 | 150 | 570 | 5,074 |
| April | 5,911 | 4,132 | 1,779 | 870 | 247 | 624 | 5,041 |
| May | 6,073 | 4,340 | 1,732 | 666 | 69 | 597 | 5,407 |
| June | 6,769 | 4,807 | 1,962 | 669 | 116 | 554 | 6,099 |
| July | 7,588 | 5,295 | 2,293 | 680 | 149 | 531 | 6,908 |
| August | 7,454 | 5,510 | 1,944 | 664 | 141 | 523 | 6,790 |
| September | 7,178 | 5,110 | 2,068 | 795 | 116 | 680 | 6,382 |
| October | 7,068 | 5,142 | 1,926 | 646 | 84 | 562 | 6,422 |
| November | 7,068 | 5,013 | 2,055 | 737 | 164 | 573 | 6,331 |
| December | 6,833 | 4,640 | 2,194 | 1,057 | 220 | 838 | 5,776 |
| **Average** | **6,678** | **4,674** | **2,004** | **764** | **151** | **613** | **5,914** |
| **1988** January | 6,900 | 4,619 | 2,281 | 891 | 212 | 679 | 6,009 |
| February | 6,995 | 4,692 | 2,303 | 867 | 149 | 718 | 6,128 |
| March | 6,727 | 4,788 | 1,938 | 839 | 218 | 622 | 5,888 |
| April | 7,050 | 5,126 | 1,924 | 678 | 117 | 562 | 6,371 |
| May | 7,218 | 5,234 | 1,983 | 817 | 141 | 676 | 6,401 |
| June | 6,885 | 5,055 | 1,830 | 941 | 141 | 800 | 5,944 |
| July* | R 6,994 | R 5,006 | R 1,988 | R 831 | R 191 | R 640 | R 6,164 |
| August** | E *6,914* | E *5,121* | E *1,793* | E 869 | E 141 | E 728 | E 6,045 |
| **8-Mo. Average** | E **6,960** | E **4,956** | E **2,004** | E **842** | E **164** | E **678** | E **6,118** |
| **1987 8-Mo. Average** | **6,498** | **4,523** | **1,976** | **741** | **153** | **588** | **5,758** |
| **1986 8-Mo. Average** | **5,984** | **3,958** | **2,026** | **778** | **158** | **621** | **5,206** |

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Footnotes continued.

R = Revised data. (s) = Less than 500 barrels per day. E = Estimated. PE = Preliminary estimate. RE = Revised estimate.

* See Explanatory Note 9.1.

** Italics denote estimates based upon preliminary data. See Explanatory Note 8.

Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: See the last page of this section.

**Figure S1. Petroleum Overview**

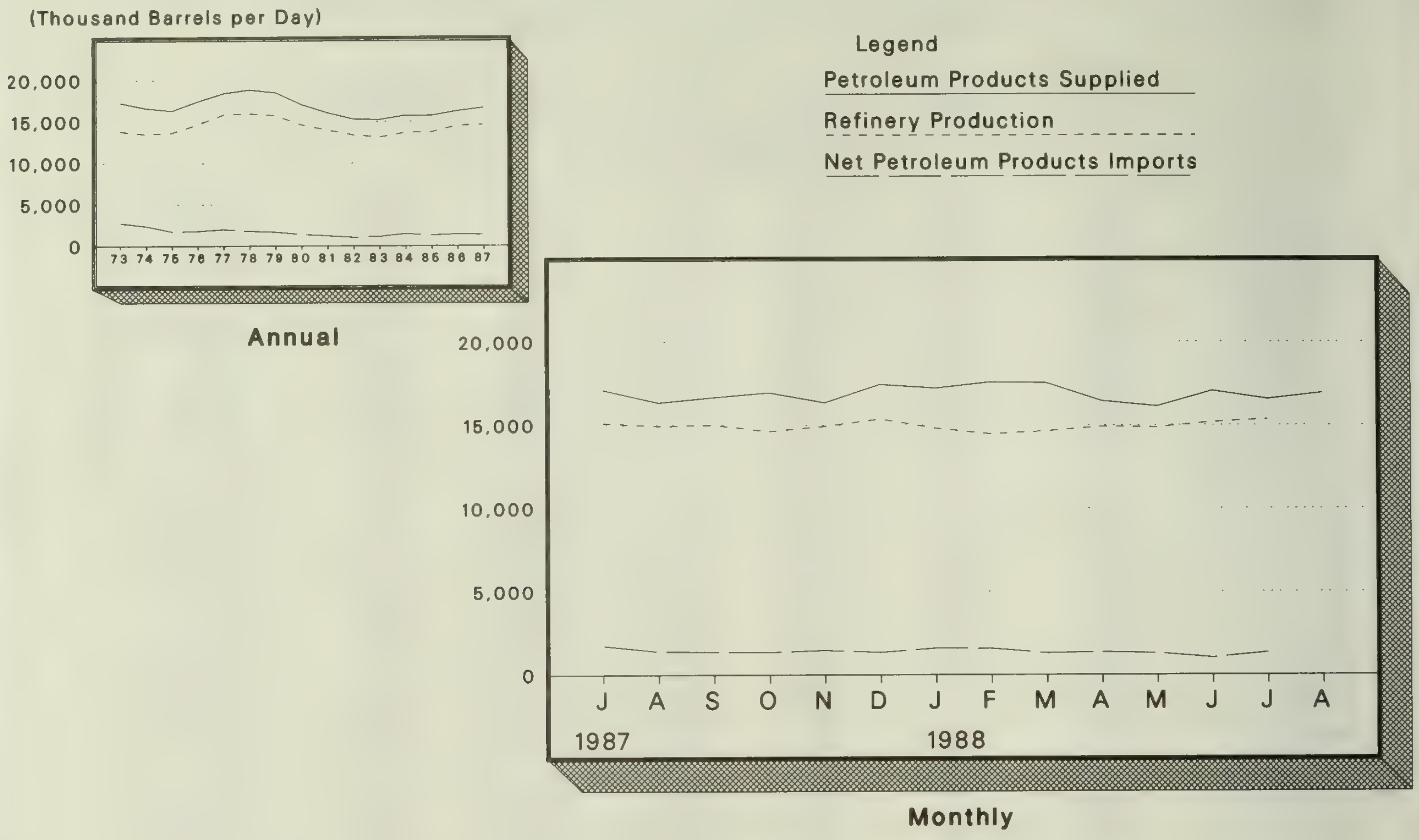
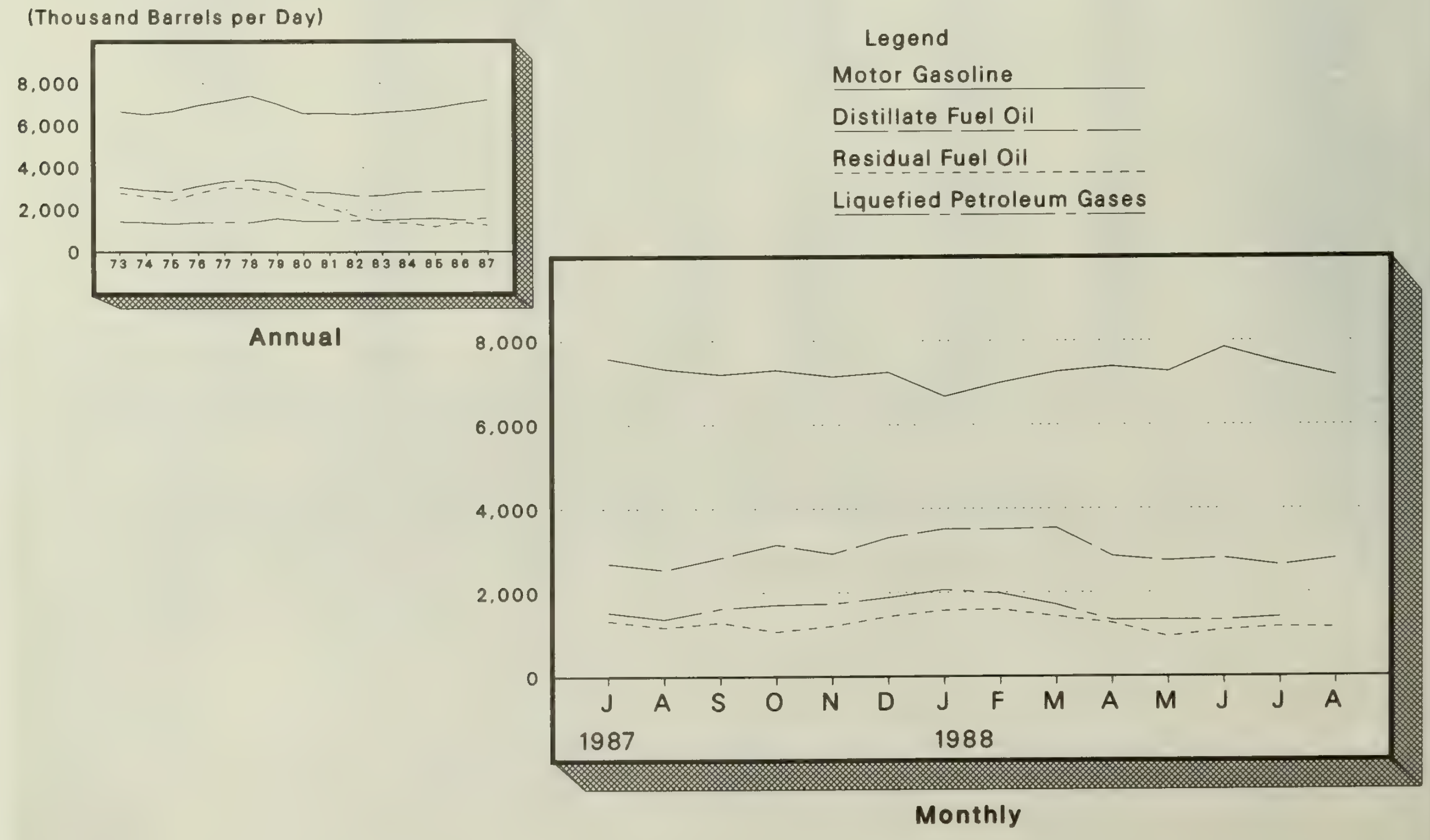
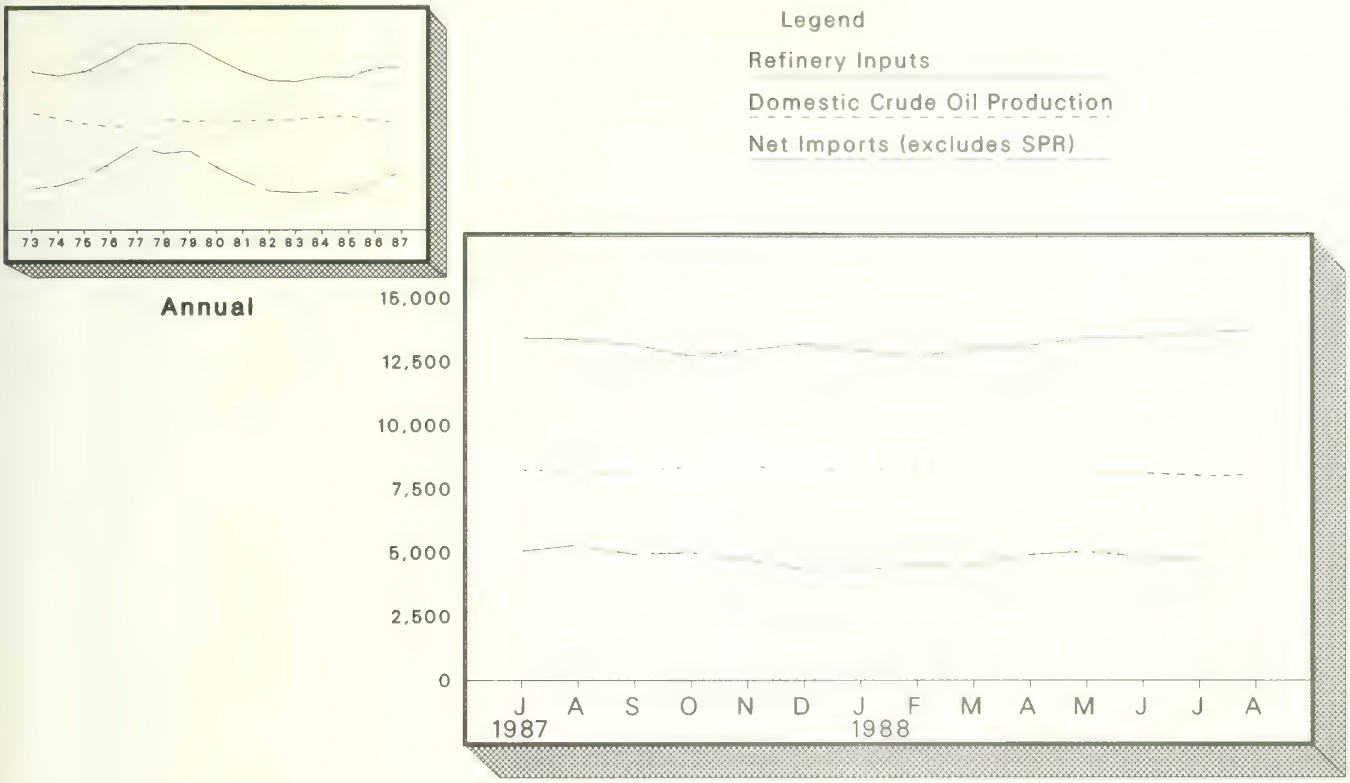


**Figure S2. Petroleum Products Supplied**



## re S3. Crude Oil Supply and Disposition

usand Barrels per Day)

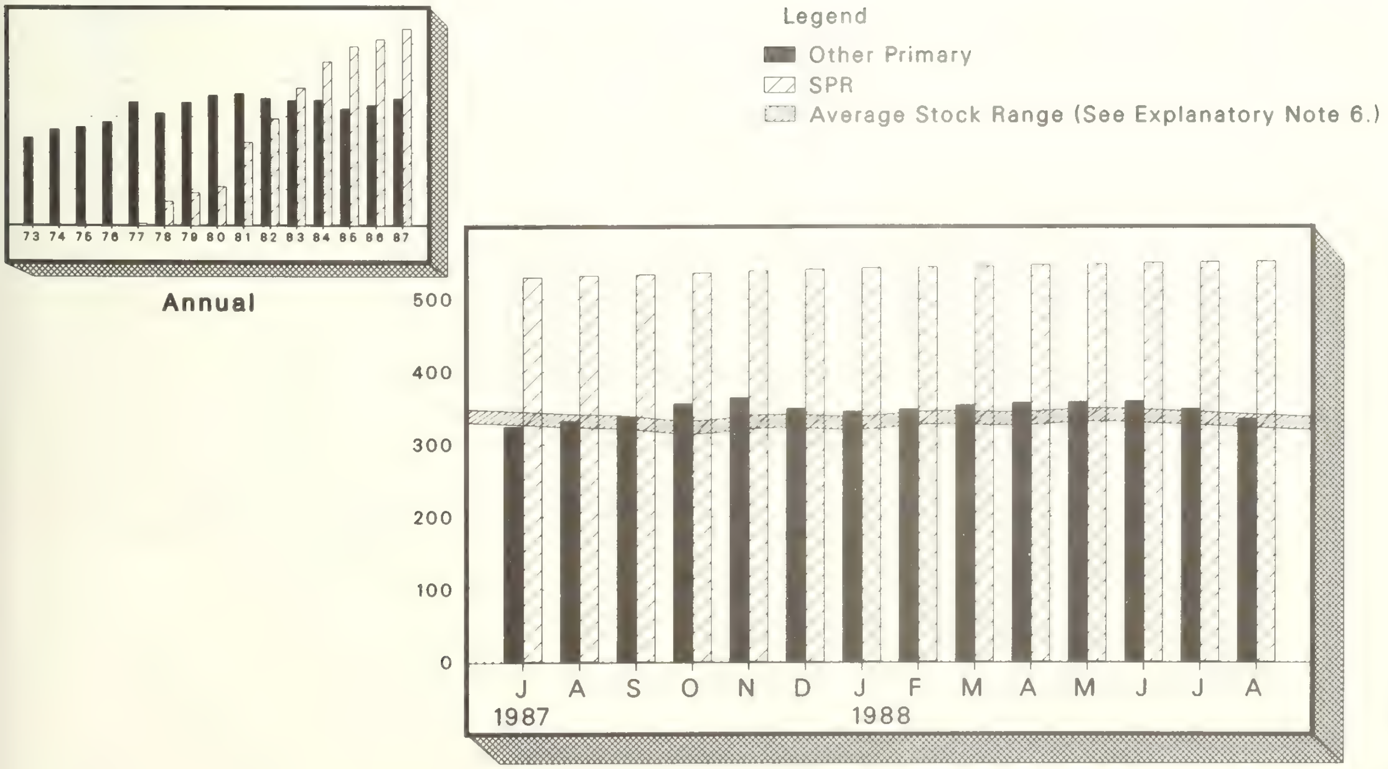


Annual

Monthly

## re S4. Crude Oil Ending Stocks

ion Barrels)



Annual

Monthly

## Table S2. Crude Oil[1] Supply and Disposition

| | | Supply | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Field Production | | Imports | | | Stock Withdrawal[3] | | Unaccounted for Crude Oil[5] |
| | | Total Domestic | Alaskan | Total | SPR[4] | Other | SPR[4] | Other | |
| | | Thousand Barrels per Day | | | | | | | |
| 1973 | Average | 9,208 | 198 | 3,244 | – | 3,244 | – | 11 | 3 |
| 1974 | Average | 8,774 | 193 | 3,477 | – | 3,477 | – | -62 | -25 |
| 1975 | Average | 8,375 | 191 | 4,105 | – | 4,105 | – | -17 | 17 |
| 1976 | Average | 8,132 | 173 | 5,287 | – | 5,287 | – | -39 | 77 |
| 1977 | Average | 8,245 | 464 | 6,615 | 21 | 6,594 | -20 | -150 | -6 |
| 1978 | Average | 8,707 | 1,229 | 6,356 | 162 | 6,195 | -163 | 84 | -57 |
| 1979 | Average | 8,552 | 1,401 | 6,519 | 67 | 6,452 | -67 | -81 | -11 |
| 1980 | Average | 8,597 | 1,617 | 5,263 | 44 | 5,219 | -45 | -52 | 34 |
| 1981 | Average | 8,572 | 1,609 | 4,396 | 256 | 4,141 | -336 | [7] 46 | 83 |
| 1982 | Average | 8,649 | 1,695 | 3,488 | 165 | 3,323 | -174 | 38 | 71 |
| 1983 | Average | 8,688 | 1,714 | 3,329 | 234 | 3,096 | -234 | [7] 20 | 114 |
| 1984 | Average | 8,879 | 1,722 | 3,426 | 197 | 3,229 | -195 | -4 | 185 |
| 1985 | Average | 8,971 | 1,825 | 3,201 | 118 | 3,083 | -117 | 67 | 145 |
| 1986 | January | 9,137 | 1,870 | 3,472 | 51 | 3,420 | -35 | -348 | 364 |
| | February | 9,173 | 1,907 | 2,968 | 24 | 2,944 | -35 | -2 | 32 |
| | March | 9,013 | 1,860 | 2,988 | 59 | 2,929 | -49 | -296 | 259 |
| | April | 8,864 | 1,836 | 3,684 | 63 | 3,621 | -63 | 104 | 70 |
| | May | 8,838 | 1,927 | 4,250 | 36 | 4,215 | -35 | 295 | 79 |
| | June | 8,623 | 1,887 | 4,635 | 64 | 4,571 | -64 | 66 | 292 |
| | July | 8,660 | 1,903 | 4,726 | 52 | 4,674 | -52 | -489 | 189 |
| | August | 8,374 | 1,811 | 4,859 | 51 | 4,809 | -51 | 293 | 93 |
| | September | 8,328 | 1,782 | 5,031 | 47 | 4,984 | -47 | -170 | 161 |
| | October | 8,419 | 1,927 | 4,419 | 37 | 4,382 | -36 | -197 | 223 |
| | November | 8,412 | 1,883 | 4,615 | 45 | 4,570 | -65 | 160 | -136 |
| | December | 8,352 | 1,807 | 4,412 | 48 | 4,365 | -68 | 254 | 28 |
| | Average | 8,680 | 1,867 | 4,178 | 48 | 4,130 | -50 | -28 | 139 |
| 1987 | January | 8,480 | 2,019 | 4,385 | 92 | 4,293 | -108 | -58 | -5 |
| | February | 8,389 | 1,853 | 3,866 | 44 | 3,822 | -64 | 42 | 382 |
| | March | 8,464 | 1,968 | 3,779 | 95 | 3,684 | -106 | -19 | 151 |
| | April | 8,498 | 1,990 | 4,132 | 57 | 4,076 | -67 | 116 | 120 |
| | May | 8,336 | 1,979 | 4,340 | 92 | 4,248 | -101 | 137 | 51 |
| | June | 8,279 | 1,930 | 4,807 | 64 | 4,743 | -69 | -97 | 434 |
| | July | 8,251 | 1,910 | 5,295 | 76 | 5,218 | -91 | 124 | 32 |
| | August | 8,210 | 1,908 | 5,510 | 63 | 5,447 | -63 | -281 | 177 |
| | September | 8,205 | 1,874 | 5,110 | 64 | 5,047 | -64 | -157 | 217 |
| | October | 8,364 | 1,986 | 5,142 | 57 | 5,085 | -57 | -604 | -3 |
| | November | 8,397 | 2,068 | 5,013 | 97 | 4,916 | -97 | -258 | 115 |
| | December | 8,318 | 2,043 | 4,640 | 68 | 4,572 | -68 | 472 | 101 |
| | Average | 8,349 | 1,962 | 4,674 | 73 | 4,601 | -80 | -49 | 145 |
| 1988 | January | [E] 8,245 | [E] 1,999 | 4,619 | 67 | 4,552 | -67 | 123 | 303 |
| | February | [E] 8,376 | [E] 2,070 | 4,692 | 49 | 4,643 | -49 | -81 | -21 |
| | March | [E] 8,347 | [E] 2,086 | 4,788 | 23 | 4,766 | -26 | -187 | 419 |
| | April | [E] 8,268 | [E] 2,029 | 5,126 | 78 | 5,049 | -77 | -117 | 126 |
| | May | [E] 8,203 | [E] 2,016 | 5,234 | 22 | 5,213 | -22 | -19 | 251 |
| | June | [E] 8,158 | [E] 1,984 | 5,055 | 70 | 4,985 | -70 | -43 | 601 |
| | July* | [RE] 8,059 | [RE] 1,960 | [R] 5,006 | [R] 42 | [R] 4,965 | [R] -42 | [R] 312 | [R] 548 |
| | August** | [PE] 8,147 | [PE] 2,042 | [E] *5,121* | [E] *22* | [E] *5,100* | [E] *-22* | [E] *557* | [E] 188 |
| | 8-Mo. Average | [PE] 8,224 | [PE] 2,023 | [E] 4,956 | [E] 46 | [E] 4,910 | [E] -47 | [E] 71 | [E] 304 |
| 1987 | 8-Mo. Average | 8,363 | 1,946 | 4,523 | 73 | 4,449 | -84 | -5 | 164 |
| 1986 | 8-Mo. Average | 8,832 | 1,875 | 3,958 | 50 | 3,908 | -48 | -49 | 174 |

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[1] Includes lease condensate.

[2] Stocks are totals as of end of period.

[3] A negative number indicates an increase in stocks and a positive number indicates a decrease.

[4] Strategic Petroleum Reserve.

[5] A balancing item.

[6] Beginning in January 1983, crude oil used directly as fuel is shown as product supplied.

[7] Stocks of Alaskan crude oil in transit were included beginning in January 1981. Stock withdrawals are calculated using new basis stock levels.

See Explanatory Notes 10 and 11.

Footnotes continued on following page.

## Table S2. Crude Oil[1] Supply and Disposition (Continued)

| | | Supply | Disposition | | | | Ending Stocks[2] | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Crude Used Directly [6] | Crude Losses | Refinery Inputs | Exports | Product Supplied [6] | Total | SPR [4] | Other Primary |
| | | Thousand Barrels per Day | | | | | Million Barrels | | |
| **1973** | **Average** | **-19** | **13** | **12,431** | **2** | **–** | **242** | **–** | **242** |
| **1974** | **Average** | **-15** | **13** | **12,133** | **3** | **–** | **265** | **–** | **265** |
| **1975** | **Average** | **-17** | **13** | **12,442** | **6** | **–** | **271** | **–** | **271** |
| **1976** | **Average** | **-18** | **15** | **13,416** | **8** | **–** | **285** | **–** | **285** |
| **1977** | **Average** | **-14** | **16** | **14,602** | **50** | **–** | **348** | **7** | **340** |
| **1978** | **Average** | **-14** | **16** | **14,739** | **158** | **–** | **376** | **67** | **309** |
| **1979** | **Average** | **-13** | **16** | **14,648** | **235** | **–** | **430** | **91** | **339** |
| **1980** | **Average** | **-13** | **15** | **13,481** | **287** | **–** | [7] **466** | **108** | [7] **358** |
| **1981** | **Average** | **-58** | **5** | **12,470** | **228** | **–** | **594** | **230** | **363** |
| **1982** | **Average** | **-59** | **3** | **11,774** | **236** | **–** | [7] **644** | **294** | [7] **350** |
| **1983** | **Average** | **–** | **2** | **11,685** | **164** | **66** | **723** | **379** | **344** |
| **1984** | **Average** | **–** | **2** | **12,044** | **181** | **64** | **796** | **451** | **345** |
| **1985** | **Average** | **–** | **1** | **12,002** | **204** | **60** | **814** | **493** | **321** |
| **1986** | January | -- | 1 | 12,374 | 159 | 57 | 826 | 494 | 332 |
| | February | -- | (s) | 11,918 | 162 | 56 | 827 | 495 | 332 |
| | March | -- | (s) | 11,652 | 212 | 52 | 838 | 497 | 341 |
| | April | -- | (s) | 12,512 | 94 | 51 | 837 | 499 | 338 |
| | May | -- | (s) | 13,279 | 98 | 49 | 829 | 500 | 329 |
| | June | -- | (s) | 13,261 | 240 | 52 | 828 | 502 | 327 |
| | July | -- | (s) | 12,917 | 65 | 51 | 845 | 503 | 342 |
| | August | -- | (s) | 13,287 | 233 | 48 | 838 | 505 | 333 |
| | September | -- | (s) | 13,097 | 161 | 45 | 844 | 506 | 338 |
| | October | -- | (s) | 12,636 | 151 | 41 | 851 | 508 | 344 |
| | November | -- | (s) | 12,831 | 115 | 41 | 849 | 509 | 339 |
| | December | -- | (s) | 12,777 | 159 | 42 | 843 | 512 | 331 |
| | **Average** | **–** | **(s)** | **12,716** | **154** | **49** | **–** | **–** | **–** |
| **1987** | January | -- | 1 | 12,570 | 84 | 41 | 848 | 515 | 333 |
| | February | -- | (s) | 12,290 | 284 | 41 | 849 | 517 | 332 |
| | March | -- | 1 | 12,081 | 150 | 39 | 852 | 520 | 332 |
| | April | -- | (s) | 12,512 | 247 | 41 | 851 | 522 | 329 |
| | May | -- | (s) | 12,653 | 69 | 42 | 850 | 525 | 325 |
| | June | -- | (s) | 13,202 | 116 | 36 | 855 | 527 | 328 |
| | July | -- | (s) | 13,430 | 149 | 32 | 854 | 530 | 324 |
| | August | -- | (s) | 13,380 | 141 | 31 | 864 | 532 | 332 |
| | September | -- | (s) | 13,168 | 116 | 28 | 871 | 534 | 337 |
| | October | -- | (s) | 12,733 | 84 | 25 | 892 | 536 | 356 |
| | November | -- | (s) | 12,981 | 164 | 25 | 902 | 539 | 364 |
| | December | -- | (s) | 13,212 | 220 | 31 | 890 | 541 | 349 |
| | **Average** | **–** | **(s)** | **12,854** | **151** | **34** | **–** | **–** | **–** |
| **1988** | January | -- | (s) | 12,975 | 212 | 36 | 888 | 543 | 345 |
| | February | -- | (s) | 12,715 | 149 | 52 | 892 | 544 | 348 |
| | March | -- | (s) | 13,072 | 218 | 52 | 899 | 545 | 354 |
| | April | -- | (s) | 13,167 | 117 | 42 | 904 | 547 | 357 |
| | May | -- | (s) | 13,472 | 141 | 34 | 906 | 548 | 358 |
| | June | -- | (s) | 13,528 | 141 | 32 | 909 | 550 | 359 |
| | July* | -- | (s) | R 13,663 | R 191 | R 29 | R 901 | 551 | R 349 |
| | August** | -- | E (s) | E *13,798* | E 141 | E 33 | E *887* | E *552* | E *335* |
| | **8-Mo. Average** | **–** | E **(s)** | E **13,303** | E **164** | E **39** | **–** | **–** | **–** |
| **1987** | **8-Mo. Average** | **–** | **(s)** | **12,770** | **153** | **38** | **–** | **–** | **–** |
| **1986** | **8-Mo. Average** | **–** | **(s)** | **12,657** | **158** | **52** | **–** | **–** | **–** |

Footnotes continued.

R = Revised data. (s) = Less than 500 barrels per day. E = Estimated. PE = Preliminary estimate. RE = Revised estimate.

* See Explanatory Note 9.2.

** Italics denote estimates based upon preliminary data. See Explanatory Note 8.

Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: See the last page of this section.

# Table S3. Crude Oil and Petroleum Product Imports

| | | Imports from OPEC Sources [1] | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Algeria | Libya | Saudi Arabia[2] | United Arab Emirates | Indonesia | Iran | Nigeria | Venezuela | Other OPEC [2] | Total OPEC[3] | Total Arab OPEC [4] |
| | | Thousand Barrels per Day | | | | | | | | | | |
| 1973 | **Average** | 136 | 164 | 486 | 71 | 213 | 223 | 459 | 1,135 | 106 | 2,993 | 915 |
| 1974 | **Average** | 190 | 4 | 461 | 74 | 300 | 469 | 713 | 979 | 88 | 3,280 | 752 |
| 1975 | **Average** | 282 | 232 | 715 | 117 | 390 | 280 | 762 | 702 | 122 | 3,601 | 1,383 |
| 1976 | **Average** | 432 | 453 | 1,230 | 254 | 539 | 298 | 1,025 | 700 | 134 | 5,066 | 2,424 |
| 1977 | **Average** | 559 | 723 | 1,380 | 335 | 541 | 535 | 1,143 | 690 | 287 | 6,193 | 3,185 |
| 1978 | **Average** | 649 | 654 | 1,144 | 385 | 573 | 555 | 919 | 645 | 226 | 5,751 | 2,963 |
| 1979 | **Average** | 636 | 658 | 1,356 | 281 | 420 | 304 | 1,080 | 690 | 212 | 5,637 | 3,056 |
| 1980 | **Average** | 488 | 554 | 1,261 | 172 | 348 | 9 | 857 | 481 | 130 | 4,300 | 2,551 |
| 1981 | **Average** | 311 | 319 | 1,129 | 81 | 366 | 0 | 620 | 406 | 90 | 3,323 | 1,848 |
| 1982 | **Average** | 170 | 26 | 552 | 92 | 248 | 35 | 514 | 412 | 97 | 2,146 | 854 |
| 1983 | **Average** | 240 | 0 | 337 | 30 | 338 | 48 | 302 | 422 | 144 | 1,862 | 632 |
| 1984 | **Average** | 323 | 1 | 325 | 117 | 343 | 10 | 216 | 548 | 166 | 2,049 | 819 |
| 1985 | **Average** | 187 | 4 | 168 | 45 | 314 | 27 | 293 | 605 | 187 | 1,830 | 472 |
| 1986 | January | 215 | 0 | 664 | 11 | 290 | 0 | 278 | 629 | 210 | 2,298 | 976 |
| | February | 157 | 0 | 574 | 0 | 290 | (s) | 204 | 518 | 64 | 1,807 | 757 |
| | March | 260 | 0 | 482 | 0 | 161 | 0 | 328 | 797 | 117 | 2,145 | 798 |
| | April | 275 | 0 | 698 | 21 | 292 | 0 | 319 | 831 | 139 | 2,576 | 1,058 |
| | May | 193 | 0 | 574 | 40 | 314 | 40 | 398 | 899 | 290 | 2,749 | 966 |
| | June | 319 | 0 | 662 | 83 | 353 | 0 | 382 | 772 | 439 | 3,010 | 1,377 |
| | July | 310 | 0 | 738 | 59 | 532 | 66 | 542 | 730 | 330 | 3,307 | 1,357 |
| | August | 363 | 0 | 680 | 37 | 274 | 93 | 606 | 916 | 378 | 3,346 | 1,339 |
| | September | 245 | 0 | 810 | 62 | 341 | 31 | 684 | 856 | 356 | 3,383 | 1,388 |
| | October | 305 | 0 | 697 | 147 | 388 | 0 | 530 | 863 | 346 | 3,276 | 1,387 |
| | November | 311 | 0 | 868 | 34 | 335 | 0 | 483 | 843 | 214 | 3,088 | 1,295 |
| | December | 291 | 0 | 769 | 30 | 251 | 0 | 511 | 841 | 284 | 2,976 | 1,223 |
| | **Average** | 271 | 0 | 685 | 44 | 318 | 19 | 440 | 793 | 265 | 2,837 | 1,162 |
| 1987 | January | 156 | 0 | 875 | 15 | 254 | 0 | 346 | 899 | 218 | 2,764 | 1,184 |
| | February | 307 | 0 | 776 | 54 | 418 | 30 | 256 | 791 | 155 | 2,785 | 1,222 |
| | March | 334 | 0 | 430 | 0 | 317 | 73 | 312 | 702 | 135 | 2,305 | 843 |
| | April | 323 | 0 | 463 | 62 | 236 | 47 | 512 | 710 | 77 | 2,430 | 866 |
| | May | 196 | 0 | 499 | 26 | 297 | 75 | 550 | 913 | 119 | 2,675 | 775 |
| | June | 247 | 0 | 782 | 45 | 261 | 165 | 546 | 808 | 268 | 3,122 | 1,275 |
| | July | 347 | 0 | 756 | 42 | 349 | 237 | 792 | 854 | 157 | 3,533 | 1,264 |
| | August | 250 | 0 | 961 | 103 | 312 | 208 | 732 | 831 | 351 | 3,748 | 1,611 |
| | September | 378 | 0 | 902 | 146 | 242 | 193 | 615 | 821 | 263 | 3,560 | 1,640 |
| | October | 274 | 0 | 1,051 | 111 | 305 | 86 | 518 | 829 | 401 | 3,576 | 1,713 |
| | November | 395 | 0 | 637 | 97 | 219 | 41 | 607 | 771 | 402 | 3,169 | 1,477 |
| | December | 339 | 0 | 876 | 31 | 216 | 23 | 613 | 717 | 220 | 3,033 | 1,415 |
| | **Average** | 295 | 0 | 751 | 61 | 285 | 98 | 535 | 804 | 231 | 3,060 | 1,274 |
| 1988 | January | 312 | 0 | 849 | 61 | 179 | [5] 1 | 406 | 752 | 540 | 3,100 | 1,632 |
| | February | 358 | 0 | 1,265 | 79 | 148 | 0 | 501 | 830 | 214 | 3,394 | 1,883 |
| | March | 259 | 0 | 934 | 6 | 123 | 0 | 541 | 790 | 352 | 3,006 | 1,506 |
| | April | 342 | 0 | 931 | 48 | 166 | 0 | 651 | 812 | 385 | 3,335 | 1,613 |
| | May | 320 | 0 | 1,034 | 34 | 298 | 0 | 488 | 835 | 354 | 3,363 | 1,710 |
| | June | 262 | 0 | 923 | 11 | 158 | 0 | 703 | 839 | 495 | 3,391 | 1,603 |
| | July | 193 | 0 | 1,076 | 43 | 198 | 0 | 614 | 706 | 609 | 3,439 | 1,897 |
| | **7-Mo. Average** | 292 | 0 | 1,000 | 40 | 182 | (s) | 557 | 794 | 423 | 3,288 | 1,691 |
| 1987 | **7-Mo. Average** | 272 | 0 | 653 | 34 | 303 | 90 | 476 | 812 | 161 | 2,802 | 1,059 |
| 1986 | **7-Mo. Average** | 248 | 0 | 628 | 31 | 319 | 16 | 352 | 742 | 229 | 2,564 | 1,044 |

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[1] Excludes petroleum imported into the United States indirectly from members of the Organization of Petroleum Exporting Countries (OPEC), primarily from Caribbean and West European areas, as petroleum products that were refined from crude oil produced by OPEC.

[2] The other members of OPEC are Ecuador, Gabon, Iraq, Kuwait, and Qatar. Prior to January 1988, imports from the Neutral Zone between Kuwait and Saudi Arabia are included in imports from Saudi Arabia. From January 1988 forward, those imports are included in imports from "Other OPEC".

[3] "Total OPEC" consists of Ecuador, Gabon, Indonesia, Iran, Nigeria, and Venezuela, as well as the Arab members. Imports from the Neutral Zone between Kuwait and Saudi Arabia are included in imports from "Total OPEC".

[4] The Arab members of OPEC are Algeria, Iraq, Kuwait, Libya, Qatar, Saudi Arabia, and the United Arab Emirates.

[5] A small amount of Iranian crude oil entered the United States (defined in this publication as the 50 States and the District of Columbia) in January 1988 from the Virgin Islands. This oil originated in Iran and was exported to the Virgin Islands prior to the signing of Executive Order 12613 on October 29, 1987.

Footnotes continued on following page.

# Table S3. Crude Oil and Petroleum Product Imports (Continued)

| | | Imports from Non-OPEC Sources[6] | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Bahamas | Canada | Mexico | Netherlands Antilles | Trinidad and Tobago | United Kingdom | Puerto Rico | Virgin Islands | Other Non-OPEC | Total Non-OPEC | Total Imports |
| | | Thousand Barrels per Day | | | | | | | | | | |
| **1973** | **Average** | 174 | 1,325 | 16 | 585 | 255 | 15 | 99 | 329 | 465 | 3,263 | 6,256 |
| **1974** | **Average** | 164 | 1,070 | 8 | 511 | 251 | 8 | 90 | 391 | 340 | 2,832 | 6,112 |
| **1975** | **Average** | 152 | 846 | 71 | 332 | 242 | 14 | 90 | 406 | 300 | 2,454 | 6,056 |
| **1976** | **Average** | 118 | 599 | 87 | 275 | 274 | 31 | 88 | 422 | 353 | 2,247 | 7,313 |
| **1977** | **Average** | 171 | 517 | 179 | 211 | 289 | 126 | 105 | 466 | 550 | 2,614 | 8,807 |
| **1978** | **Average** | 160 | 467 | 318 | 229 | 253 | 180 | 94 | 429 | 484 | 2,613 | 8,363 |
| **1979** | **Average** | 147 | 538 | 439 | 231 | 190 | 202 | 92 | 431 | 548 | 2,819 | 8,456 |
| **1980** | **Average** | 78 | 455 | 533 | 225 | 176 | 176 | 88 | 388 | 491 | 2,609 | 6,909 |
| **1981** | **Average** | 74 | 447 | 522 | 197 | 133 | 375 | 62 | 327 | 534 | 2,672 | 5,996 |
| **1982** | **Average** | 65 | 482 | 685 | 175 | 112 | 456 | 50 | 316 | 627 | 2,968 | 5,113 |
| **1983** | **Average** | 125 | 547 | 826 | 189 | 96 | 382 | 40 | 282 | 701 | 3,189 | 5,051 |
| **1984** | **Average** | 88 | 630 | 748 | 188 | 94 | 402 | 42 | 294 | 902 | 3,388 | 5,437 |
| **1985** | **Average** | 40 | 770 | 816 | 40 | 113 | 310 | 28 | 247 | 873 | 3,237 | 5,067 |
| **1986** | January | 62 | 823 | 681 | 58 | 108 | 333 | 21 | 326 | 862 | 3,275 | 5,573 |
| | February | 33 | 690 | 557 | 11 | 85 | 218 | 18 | 309 | 949 | 2,870 | 4,676 |
| | March | 18 | 750 | 616 | 27 | 79 | 178 | 25 | 186 | 688 | 2,567 | 4,712 |
| | April | 34 | 798 | 694 | 13 | 111 | 188 | 23 | 209 | 793 | 2,863 | 5,439 |
| | May | 32 | 881 | 743 | 37 | 130 | 365 | 27 | 237 | 1,199 | 3,651 | 6,400 |
| | June | 29 | 753 | 884 | 17 | 167 | 569 | 30 | 233 | 1,157 | 3,838 | 6,848 |
| | July | 44 | 763 | 850 | 25 | 131 | 353 | 29 | 237 | 1,202 | 3,634 | 6,942 |
| | August | 39 | 801 | 738 | 12 | 133 | 584 | 7 | 214 | 1,294 | 3,822 | 7,168 |
| | September | 15 | 801 | 615 | 17 | 162 | 437 | 23 | 291 | 1,345 | 3,706 | 7,090 |
| | October | 38 | 842 | 680 | 26 | 112 | 173 | 21 | 215 | 1,043 | 3,151 | 6,427 |
| | November | 39 | 960 | 565 | 53 | 129 | 448 | 21 | 179 | 1,111 | 3,504 | 6,592 |
| | December | 57 | 809 | 746 | 7 | 148 | 351 | 12 | 291 | 1,304 | 3,724 | 6,700 |
| | **Average** | 37 | 807 | 699 | 25 | 125 | 350 | 21 | 244 | 1,080 | 3,387 | 6,224 |
| **1987** | January | 59 | 799 | 689 | 29 | 100 | 384 | 33 | 327 | 1,170 | 3,589 | 6,353 |
| | February | 56 | 783 | 692 | 23 | 127 | 260 | 24 | 296 | 938 | 3,199 | 5,984 |
| | March | 43 | 738 | 721 | 14 | 124 | 322 | 17 | 247 | 1,262 | 3,489 | 5,794 |
| | April | 43 | 818 | 679 | 12 | 123 | 485 | 24 | 259 | 1,037 | 3,481 | 5,911 |
| | May | 31 | 884 | 541 | 33 | 117 | 392 | 21 | 214 | 1,164 | 3,398 | 6,073 |
| | June | 22 | 912 | 664 | 13 | 114 | 377 | 21 | 281 | 1,242 | 3,646 | 6,769 |
| | July | 46 | 901 | 680 | 71 | 98 | 354 | 17 | 288 | 1,598 | 4,055 | 7,588 |
| | August | 27 | 841 | 577 | 51 | 100 | 289 | 20 | 274 | 1,526 | 3,706 | 7,454 |
| | September | 48 | 846 | 705 | 42 | 105 | 259 | 25 | 271 | 1,318 | 3,618 | 7,178 |
| | October | 26 | 938 | 697 | 16 | 88 | 321 | 17 | 250 | 1,138 | 3,492 | 7,068 |
| | November | 31 | 827 | 627 | 14 | 111 | 456 | 15 | 235 | 1,585 | 3,899 | 7,068 |
| | December | 10 | 883 | 591 | 24 | 73 | 324 | 23 | 327 | 1,543 | 3,800 | 6,833 |
| | **Average** | 37 | 848 | 655 | 29 | 106 | 352 | 21 | 272 | 1,296 | 3,617 | 6,678 |
| **1988** | January | 49 | 953 | 767 | 40 | 104 | 312 | 29 | 341 | 1,205 | 3,800 | 6,900 |
| | February | 58 | 995 | 699 | 21 | 93 | 313 | 16 | 200 | 1,206 | 3,601 | 6,995 |
| | March | 45 | 989 | 745 | 30 | 89 | 461 | 22 | 180 | 1,160 | 3,720 | 6,727 |
| | April | 12 | 975 | 674 | 31 | 82 | 581 | 29 | 193 | 1,137 | 3,714 | 7,050 |
| | May | 17 | 990 | 718 | 38 | 102 | 383 | 20 | 243 | 1,345 | 3,855 | 7,218 |
| | June | 25 | 1,022 | 765 | 19 | 112 | 232 | 13 | 212 | 1,094 | 3,494 | 6,885 |
| | July | 15 | 962 | 723 | 35 | 96 | 208 | 22 | 215 | 1,280 | 3,556 | 6,994 |
| | **7-Mo. Average** | 31 | 983 | 728 | 31 | 97 | 356 | 22 | 227 | 1,205 | 3,679 | 6,967 |
| **1987** | **7-Mo. Average** | 43 | 834 | 666 | 28 | 115 | 369 | 22 | 273 | 1,206 | 3,556 | 6,358 |
| **1986** | **7-Mo. Average** | 36 | 781 | 719 | 27 | 116 | 316 | 25 | 248 | 979 | 3,247 | 5,811 |

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Footnotes continued.

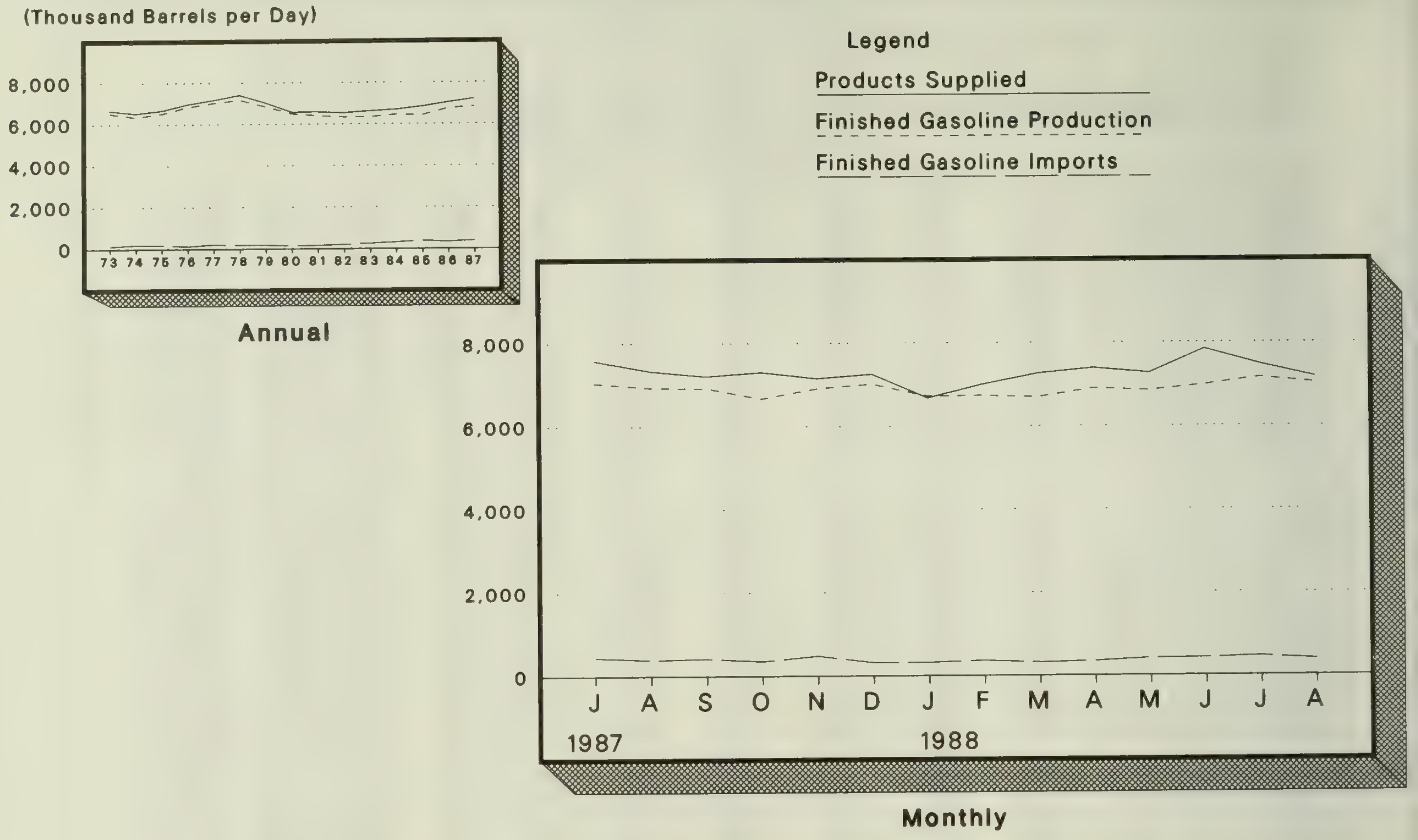
[6] Includes petroleum imported into the United States indirectly from members of OPEC, primarily from Caribbean and West European areas as petroleum products that were refined from crude oil produced by OPEC.

(s) = Less than 500 barrels per day.

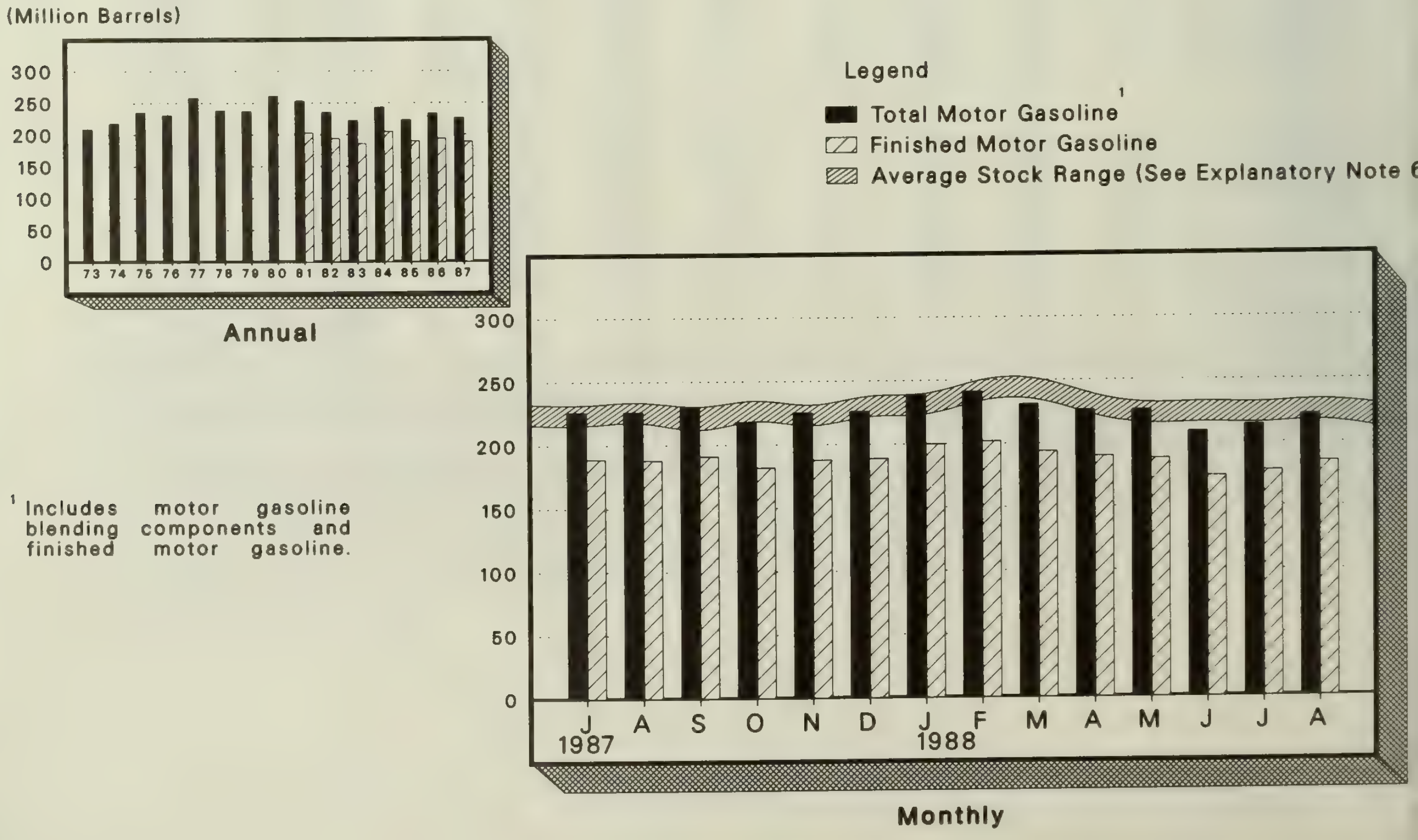
Notes: • Beginning in October 1977, Strategic Petroleum Reserve imports are included. • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: See the last page of this section.

## Figure S5. Finished Motor Gasoline Supply and Disposition



## Figure S6. Motor Gasoline Ending Stocks



[1] Includes motor gasoline blending components and finished motor gasoline.

## Table S4. Finished Motor Gasoline Supply and Disposition

| | | Supply | | | Disposition | | | | Ending Stocks[1] | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Product Supplied | | | | |
| | | Total Production | Imports[2] | Stock Withdrawal[2,3] | Exports | Total[4] | Unleaded | Unleaded | Total Motor Gasoline[5] | Finished Motor Gasoline |
| | | Thousand Barrels per Day | | | | | | Percent of Total | Million Barrels | |
| **1973** | **Average** | **6,535** | **134** | **9** | **4** | **6,674** | -- | -- | **209** | -- |
| **1974** | **Average** | **6,360** | **204** | **-24** | **2** | **6,537** | -- | -- | [6] **218** | -- |
| **1975** | **Average** | **6,520** | **184** | [6] **-28** | **2** | **6,675** | -- | -- | **235** | -- |
| **1976** | **Average** | **6,841** | **131** | **10** | **3** | **6,978** | -- | -- | **231** | -- |
| **1977** | **Average** | **7,033** | **217** | **-72** | **2** | **7,177** | **1,976** | **27.5** | **258** | -- |
| **1978** | **Average** | **7,169** | **190** | **54** | **1** | **7,412** | **2,521** | **34.0** | **238** | -- |
| **1979** | **Average** | **6,852** | **181** | **2** | (s) | **7,034** | **2,798** | **39.8** | **237** | -- |
| **1980** | **Average** | **6,506** | **140** | **-66** | **1** | **6,579** | **3,067** | **46.6** | [6] **261** | -- |
| **1981** | **Average**[7] | **6,405** | **157** | [6] **28** | **2** | **6,588** | **3,264** | **49.5** | **253** | -- |
| **1982** | **Average** | **6,338** | **197** | **25** | **20** | **6,539** | **3,409** | **52.1** | [6] **235** | -- |
| **1983** | **Average** | **6,340** | **247** | [6] **45** | **10** | **6,622** | **3,647** | **55.1** | **222** | **186** |
| **1984** | **Average** | **6,453** | **299** | **-54** | **6** | **6,693** | **3,987** | **59.6** | **243** | **205** |
| **1985** | **Average** | **6,419** | **381** | **41** | **10** | **6,831** | **4,406** | **64.5** | **223** | **190** |
| **1986** | January | 6,522 | 332 | -347 | 6 | 6,502 | 4,404 | 67.7 | 238 | 201 |
| | February | 6,302 | 334 | -156 | 11 | 6,469 | 4,365 | 67.5 | 244 | 205 |
| | March | 6,061 | 224 | 691 | 21 | 6,955 | 4,678 | 67.3 | 219 | 184 |
| | April | 6,498 | 291 | 338 | 23 | 7,105 | 4,783 | 67.3 | 207 | 174 |
| | May | 7,095 | 471 | -450 | 9 | 7,106 | 4,729 | 66.5 | 221 | 188 |
| | June | 7,101 | 392 | -265 | 18 | 7,209 | 4,914 | 68.2 | 230 | 196 |
| | July | 6,956 | 337 | 189 | 47 | 7,436 | 5,182 | 69.7 | 224 | 190 |
| | August | 7,092 | 303 | 83 | 43 | 7,435 | 5,138 | 69.1 | 222 | 187 |
| | September | 6,891 | 303 | -289 | 40 | 6,864 | 4,813 | 70.1 | 234 | 196 |
| | October | 6,616 | 322 | 372 | 61 | 7,250 | 5,086 | 70.1 | 222 | 184 |
| | November | 6,895 | 280 | -200 | 96 | 6,879 | 4,918 | 71.5 | 229 | 190 |
| | December | 6,970 | 320 | -122 | 24 | 7,143 | 5,193 | 72.7 | 233 | 194 |
| | **Average** | **6,752** | **326** | **-11** | **33** | **7,034** | **4,854** | **69.0** | -- | -- |
| **1987** | January | 6,714 | 393 | -528 | 44 | 6,535 | 4,822 | 73.8 | 251 | 211 |
| | February | 6,365 | 309 | 144 | 22 | 6,796 | 5,068 | 74.6 | 250 | 207 |
| | March | 6,569 | 364 | 51 | 20 | 6,964 | 5,193 | 74.6 | 248 | 205 |
| | April | 6,850 | 374 | 133 | 42 | 7,314 | 5,405 | 73.9 | 242 | 201 |
| | May | 6,991 | 354 | 164 | 48 | 7,460 | 5,569 | 74.7 | 235 | 196 |
| | June | 7,089 | 385 | 111 | 46 | 7,539 | 5,678 | 75.3 | 230 | 193 |
| | July | 7,043 | 452 | 119 | 33 | 7,581 | 5,740 | 75.7 | 226 | 189 |
| | August | 6,933 | 396 | 29 | 19 | 7,338 | 5,656 | 77.1 | 226 | 188 |
| | September | 6,921 | 421 | -107 | 30 | 7,205 | 5,536 | 76.8 | 230 | 191 |
| | October | 6,668 | 356 | 302 | 21 | 7,305 | 5,636 | 77.1 | 218 | 182 |
| | November | 6,907 | 484 | -208 | 32 | 7,151 | 5,589 | 78.2 | 225 | 188 |
| | December | 7,015 | 320 | -24 | 59 | 7,251 | 5,715 | 78.8 | 226 | 189 |
| | **Average** | **6,841** | **384** | **15** | **35** | **7,206** | **5,470** | **75.9** | – | – |
| **1988** | January | 6,723 | 324 | -361 | 8 | 6,679 | 5,392 | 80.7 | 239 | 200 |
| | February | 6,736 | 365 | -78 | 18 | 7,004 | 5,571 | 79.5 | 241 | 202 |
| | March | 6,695 | 318 | 271 | 18 | 7,265 | 5,845 | 80.4 | 231 | 194 |
| | April | 6,906 | 349 | 148 | 18 | 7,384 | 5,946 | 80.5 | 226 | 190 |
| | May | 6,847 | 415 | 34 | 28 | 7,269 | 5,813 | 80.0 | 226 | 188 |
| | June | 6,983 | 424 | 490 | 59 | 7,838 | 6,356 | 81.1 | 209 | 174 |
| | July* | R 7,159 | R 461 | R -135 | R 12 | R 7,473 | R 6,126 | R 82.0 | R 214 | R 178 |
| | August** | E *7,030* | E *385* | E *-205* | E 40 | E *7,170* | E *5,915* | E *82.5* | E *222* | E *185* |
| | **8-Mo. Average** | E **6,886** | E **380** | E **19** | E **25** | E **7,260** | E **5,871** | E **80.9** | – | – |
| **1987** | **8-Mo. Average** | **6,824** | **379** | **26** | **34** | **7,194** | **5,394** | **75.0** | – | – |
| **1986** | **8-Mo. Average** | **6,707** | **336** | **12** | **22** | **7,033** | **4,778** | **67.9** | – | – |

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[1] Stocks are totals as of end of period.

[2] Beginning in 1981, excludes blending components.

[3] A negative number indicates an increase in stocks and a positive number indicates a decrease.

[4] Includes gasohol.

[5] Includes motor gasoline blending components.

[6] In January 1975, 1981, and 1983, numerous respondents were added to surveys affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10.

[7] Beginning in January 1981, survey forms were modified. See Explanatory Note 12.

R = Revised data. (s) = Less than 500 barrels per day. E = Estimated.

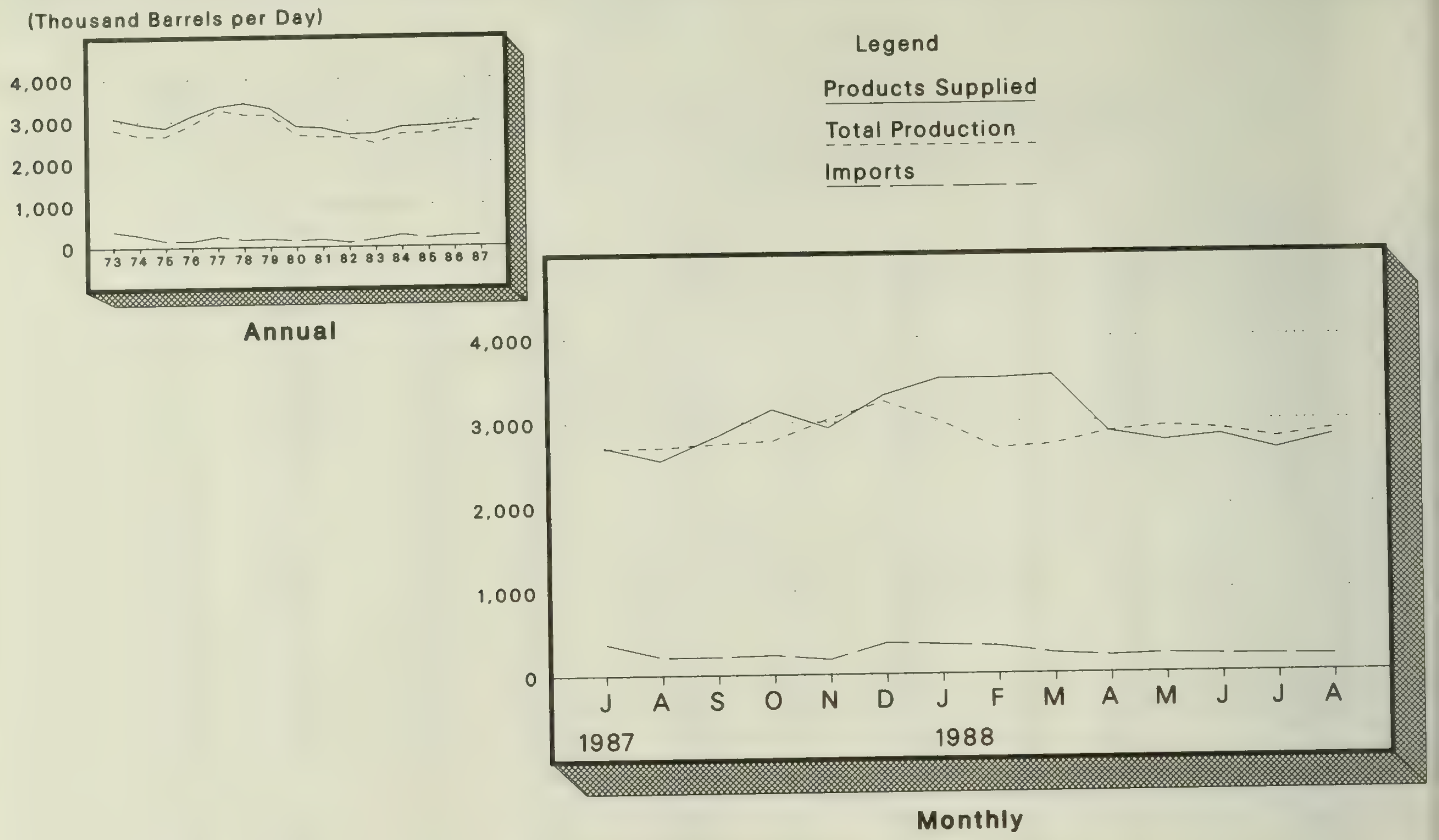
* See Explanatory Note 9.3.

** Italics denote estimates based upon preliminary data. See Explanatory Note 8.

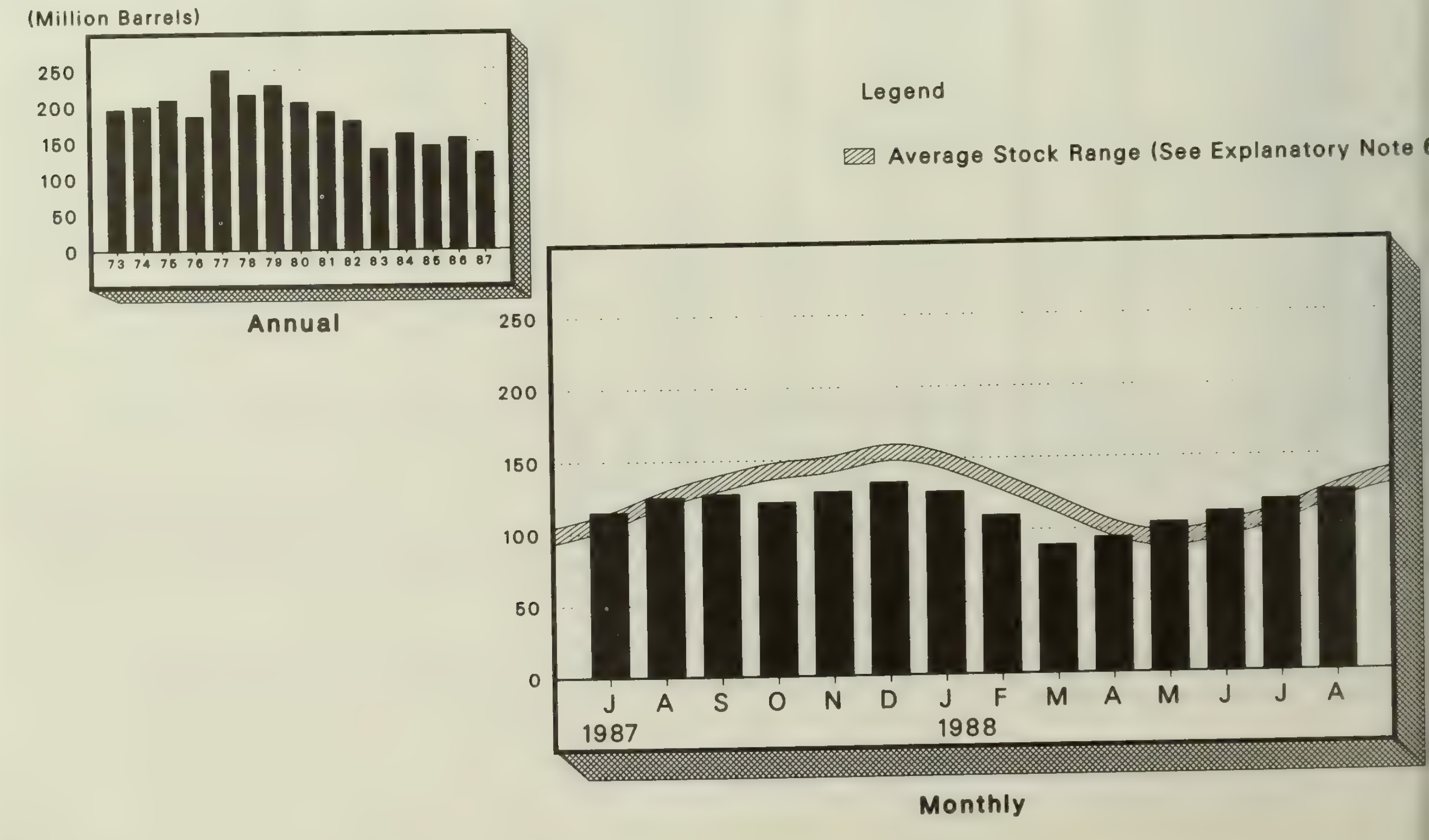
Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: See the last page of this section.

## Figure S7. Distillate Fuel Oil Supply and Disposition



## Figure S8. Distillate Fuel Oil Ending Stocks



## Table S5. Distillate Fuel Oil Supply and Disposition

| | | Supply | | | | Disposition | | |
|---|---|---|---|---|---|---|---|---|
| | | Total Production | Imports | Stock Withdrawal [1] | Crude Used Directly [2] | Exports | Product Supplied [2] | Ending Stocks [3] |
| | | Thousand Barrels per Day | | | | | | Million Barrels |
| **1973** | **Average** | **2,822** | **392** | **-115** | **2** | **9** | **3,092** | **196** |
| **1974** | **Average** | **2,669** | **289** | **-9** | **2** | **2** | **2,948** | **[4] 200** |
| **1975** | **Average** | **2,654** | **155** | **[4] 40** | **2** | **1** | **2,851** | **209** |
| **1976** | **Average** | **2,924** | **146** | **62** | **1** | **1** | **3,133** | **186** |
| **1977** | **Average** | **3,278** | **250** | **-176** | **1** | **1** | **3,352** | **250** |
| **1978** | **Average** | **3,167** | **173** | **93** | **1** | **3** | **3,432** | **216** |
| **1979** | **Average** | **3,153** | **193** | **-34** | **1** | **3** | **3,311** | **229** |
| **1980** | **Average** | **2,662** | **142** | **64** | **1** | **3** | **2,866** | **[4] 205** |
| **1981** | **Average[5]** | **2,613** | **173** | **[4] 38** | **10** | **5** | **2,829** | **192** |
| **1982** | **Average** | **2,606** | **93** | **35** | **10** | **74** | **2,671** | **[4] 179** |
| **1983** | **Average** | **2,456** | **174** | **[4] 124** | **–** | **64** | **2,690** | **140** |
| **1984** | **Average** | **2,681** | **272** | **-57** | **–** | **51** | **2,845** | **161** |
| **1985** | **Average** | **2,687** | **200** | **48** | **--** | **67** | **2,868** | **144** |
| **1986** | January | 2,899 | 325 | 232 | -- | 126 | 3,330 | 136 |
| | February | 2,563 | 169 | 860 | -- | 176 | 3,416 | 112 |
| | March | 2,643 | 217 | 438 | -- | 131 | 3,168 | 99 |
| | April | 2,788 | 147 | 97 | -- | 128 | 2,904 | 96 |
| | May | 2,858 | 149 | -95 | -- | 149 | 2,762 | 99 |
| | June | 2,729 | 169 | -301 | -- | 53 | 2,544 | 108 |
| | July | 2,710 | 313 | -355 | -- | 75 | 2,592 | 119 |
| | August | 2,922 | 370 | -607 | -- | 64 | 2,621 | 138 |
| | September | 2,865 | 262 | -489 | -- | 98 | 2,540 | 152 |
| | October | 2,717 | 243 | 25 | -- | 74 | 2,912 | 152 |
| | November | 2,917 | 254 | -222 | -- | 72 | 2,877 | 158 |
| | December | 2,943 | 339 | 102 | -- | 55 | 3,329 | 155 |
| | **Average** | **2,798** | **247** | **-31** | **–** | **100** | **2,914** | **–** |
| **1987** | January | 2,759 | 222 | 444 | -- | 115 | 3,310 | 141 |
| | February | 2,556 | 253 | 629 | -- | 93 | 3,345 | 124 |
| | March | 2,421 | 297 | 464 | -- | 67 | 3,116 | 109 |
| | April | 2,553 | 192 | 300 | -- | 53 | 2,991 | 100 |
| | May | 2,563 | 203 | -31 | -- | 51 | 2,684 | 101 |
| | June | 2,689 | 265 | -104 | -- | 61 | 2,790 | 104 |
| | July | 2,700 | 381 | -329 | -- | 38 | 2,713 | 115 |
| | August | 2,706 | 222 | -327 | -- | 47 | 2,553 | 125 |
| | September | 2,748 | 222 | -68 | -- | 64 | 2,838 | 127 |
| | October | 2,780 | 237 | 187 | -- | 53 | 3,151 | 121 |
| | November | 3,035 | 187 | -234 | -- | 56 | 2,932 | 128 |
| | December | 3,242 | 378 | -209 | -- | 92 | 3,318 | 134 |
| | **Average** | **2,731** | **255** | **56** | **–** | **66** | **2,976** | **–** |
| **1988** | January | 3,008 | 355 | 236 | -- | 82 | 3,517 | 127 |
| | February | 2,683 | 330 | 604 | -- | 107 | 3,511 | 110 |
| | March | 2,720 | 243 | 656 | -- | 74 | 3,544 | 89 |
| | April | 2,869 | 208 | -166 | -- | 42 | 2,870 | 94 |
| | May | 2,931 | 228 | -328 | -- | 74 | 2,757 | 104 |
| | June | 2,893 | 209 | -207 | -- | 76 | 2,820 | 111 |
| | July* | R 2,783 | R 205 | R -283 | -- | R 58 | R 2,647 | 119 |
| | August** | E *2,876* | E *196* | E *-195* | -- | E 75 | E *2,802* | E *125* |
| | **8-Mo. Average** | **E 2,846** | **E 246** | **E 37** | **–** | **E 73** | **E 3,056** | **–** |
| **1987** | **8-Mo. Average** | **2,619** | **255** | **125** | **–** | **65** | **2,933** | **–** |
| **1986** | **8-Mo. Average** | **2,767** | **234** | **24** | **–** | **112** | **2,913** | **–** |

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[1] A negative number indicates an increase in stocks and a positive number indicates a decrease.

[2] Beginning in January 1983, product supplied for distillate fuel oil does not include crude oil used directly. See Explanatory Note 4.

[3] Stocks are totals as of end of period.

[4] In January 1975, 1981, and 1983, numerous respondents were added to surveys affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10.

[5] Beginning in January 1981, survey forms were modified. See Explanatory Note 12.

R = Revised data. (s) = Less than 500 barrels per day. E = Estimated.

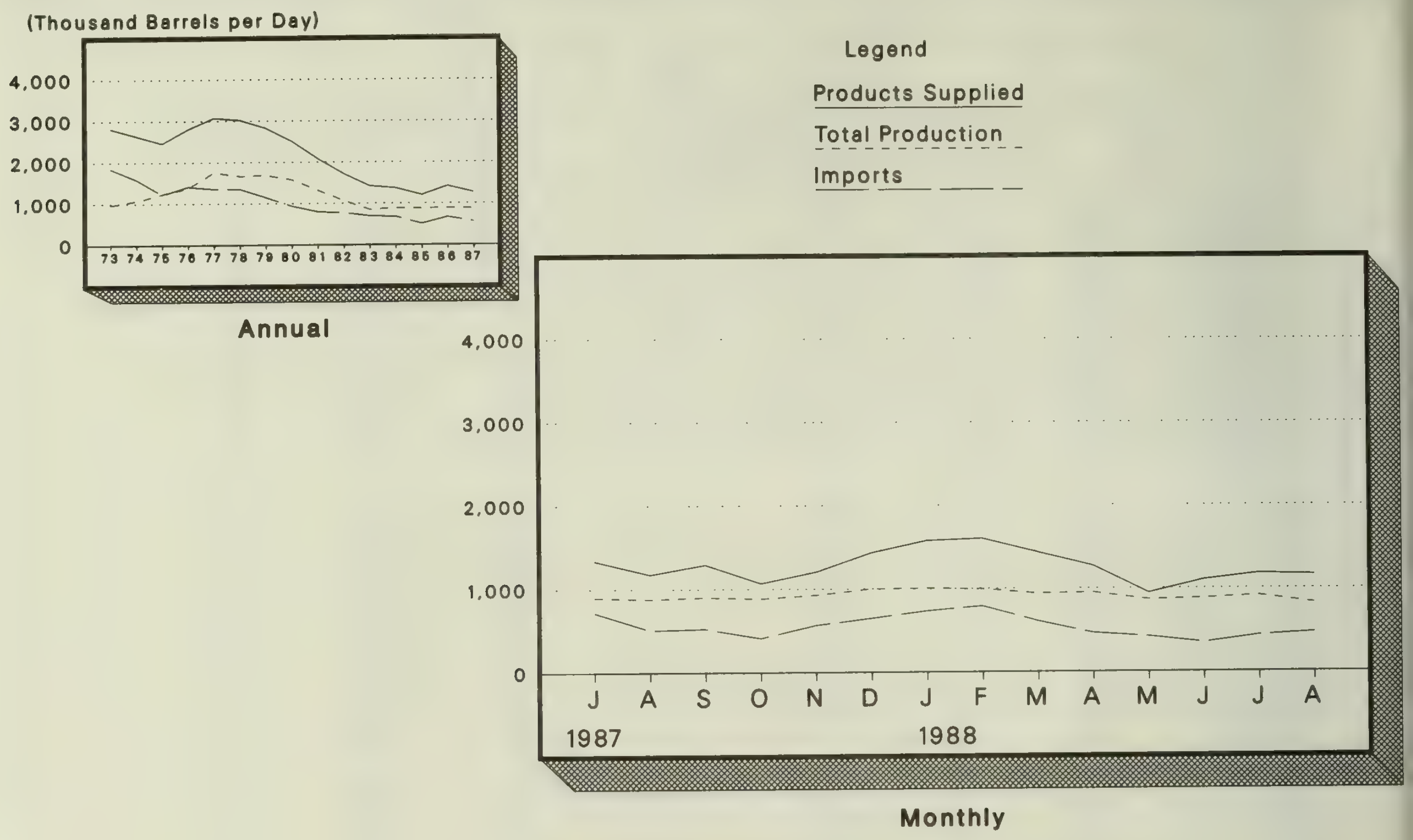
* See Explanatory Note 9.4.

** Italics denote estimates based upon preliminary data. See Explanatory Note 8.

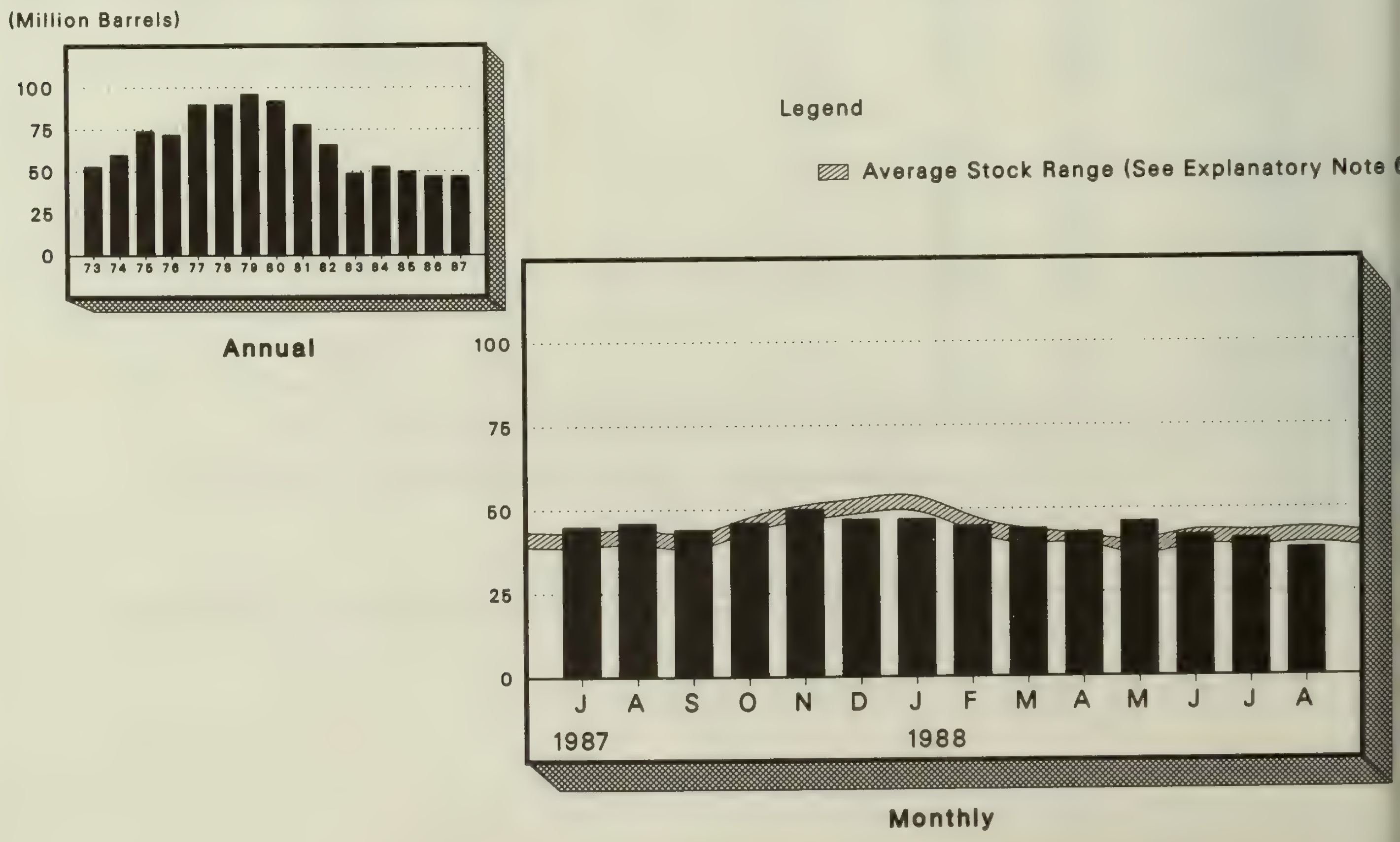
Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: See the last page of this section.

## Figure S9. Residual Fuel Oil Supply and Disposition



## Figure S10. Residual Fuel Oil Ending Stocks



## able S6. Residual Fuel Oil Supply and Disposition

| | Supply | | | | Disposition | | |
|---|---|---|---|---|---|---|---|
| | Total Production | Imports | Stock Withdrawal[1] | Crude Used Directly[2] | Exports | Product Supplied[2] | Ending Stocks[3] |
| | Thousand Barrels per Day | | | | | | Million Barrels |
| **73 Average** | **971** | **1,853** | **5** | **17** | **23** | **2,822** | **53** |
| **74 Average** | **1,070** | **1,587** | **-17** | **13** | **14** | **2,639** | **[4] 60** |
| **75 Average** | **1,235** | **1,223** | **[4] 2** | **15** | **15** | **2,462** | **74** |
| **76 Average** | **1,377** | **1,413** | **5** | **17** | **12** | **2,801** | **72** |
| **77 Average** | **1,754** | **1,359** | **-48** | **13** | **6** | **3,071** | **90** |
| **78 Average** | **1,667** | **1,355** | **-1** | **13** | **13** | **3,023** | **90** |
| **79 Average** | **1,687** | **1,151** | **-15** | **12** | **9** | **2,826** | **96** |
| **80 Average** | **1,580** | **939** | **10** | **12** | **33** | **2,508** | **[4] 92** |
| **81 Average[5]** | **1,321** | **800** | **[4] 37** | **48** | **118** | **2,088** | **78** |
| **82 Average** | **1,070** | **776** | **32** | **48** | **209** | **1,716** | **[4] 66** |
| **83 Average** | **852** | **699** | **[4] 55** | **–** | **185** | **1,421** | **49** |
| **84 Average** | **891** | **681** | **-12** | **–** | **190** | **1,369** | **53** |
| **85 Average** | **882** | **510** | **7** | **–** | **197** | **1,202** | **50** |
| 86 January | 940 | 622 | 56 | -- | 211 | 1,407 | 49 |
| February | 856 | 604 | 200 | -- | 183 | 1,478 | 43 |
| March | 813 | 626 | 108 | -- | 113 | 1,435 | 40 |
| April | 933 | 545 | 127 | -- | 202 | 1,402 | 36 |
| May | 913 | 675 | -114 | -- | 129 | 1,345 | 39 |
| June | 818 | 712 | -111 | -- | 43 | 1,377 | 43 |
| July | 850 | 673 | 75 | -- | 90 | 1,508 | 40 |
| August | 896 | 793 | -29 | -- | 174 | 1,485 | 41 |
| September | 854 | 641 | -89 | -- | 110 | 1,296 | 44 |
| October | 827 | 635 | -59 | -- | 144 | 1,259 | 46 |
| November | 975 | 574 | -15 | -- | 143 | 1,391 | 46 |
| December | 987 | 913 | -37 | -- | 224 | 1,638 | 47 |
| **Average** | **889** | **669** | **8** | **–** | **147** | **1,418** | -- |
| 87 January | 920 | 701 | 81 | -- | 198 | 1,504 | 45 |
| February | 825 | 668 | 243 | -- | 221 | 1,515 | 38 |
| March | 863 | 559 | -38 | -- | 150 | 1,234 | 39 |
| April | 831 | 476 | 114 | -- | 239 | 1,182 | 36 |
| May | 813 | 505 | -145 | -- | 144 | 1,029 | 40 |
| June | 864 | 481 | -33 | -- | 105 | 1,207 | 41 |
| July | 901 | 721 | -108 | -- | 175 | 1,339 | 45 |
| August | 882 | 512 | -32 | -- | 185 | 1,176 | 46 |
| September | 904 | 526 | 42 | -- | 177 | 1,296 | 44 |
| October | 887 | 414 | -39 | -- | 194 | 1,069 | 46 |
| November | 928 | 568 | -145 | -- | 146 | 1,205 | 50 |
| December | 1,001 | 650 | 83 | -- | 300 | 1,434 | 47 |
| **Average** | **885** | **565** | **(s)** | **–** | **186** | **1,264** | **–** |
| 88 January | 1,009 | 737 | 23 | -- | 190 | 1,578 | 47 |
| February | 997 | 792 | 40 | -- | 229 | 1,601 | 45 |
| March | 944 | 610 | 45 | -- | 165 | 1,434 | 44 |
| April | 951 | 465 | 27 | -- | 170 | 1,272 | 43 |
| May | 866 | 423 | -81 | -- | 263 | 945 | 46 |
| June | 881 | 349 | 121 | -- | 249 | 1,102 | 42 |
| July* | R 913 | R 436 | R 34 | -- | R 206 | R 1,177 | R 41 |
| August** | E *826* | E *472* | E *121* | -- | E *257* | E *1,162* | E *38* |
| **8-Mo. Average** | **E 923** | **E 534** | **E 41** | **–** | **E 216** | **E 1,282** | **–** |
| **87 8-Mo. Average** | **863** | **577** | **7** | **–** | **177** | **1,271** | **–** |
| **86 8-Mo. Average** | **878** | **657** | **37** | **–** | **143** | **1,429** | **–** |

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[1] A negative number indicates an increase in stocks and a positive number indicates a decrease.

[2] Beginning in January 1983, product supplied for residual fuel oil does not include crude oil used directly. See Explanatory Note 4.

[3] Stocks are totals as of end of period.

[4] In January 1975, 1981, and 1983, numerous respondents were added to surveys affecting stocks reported and stock withdrawal calculations. ee Explanatory Note 10.

[5] Beginning in January 1981, survey forms were modified. See Explanatory Note 12.

R = Revised data. (s) = Less than 500 barrels per day. E = Estimated.

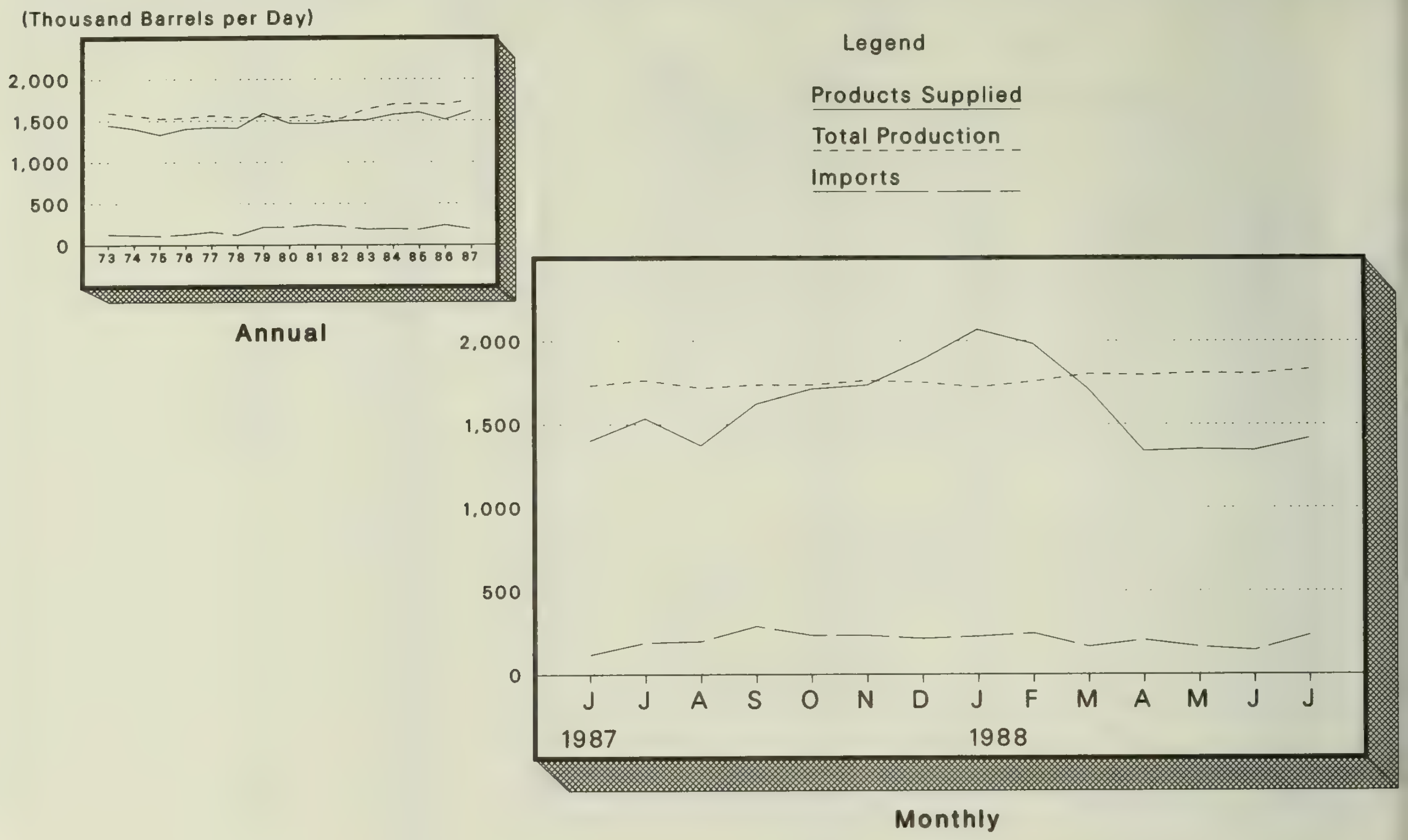
* See Explanatory Note 9.4.

** Italics denote estimates based upon preliminary data. See Explanatory Note 8.

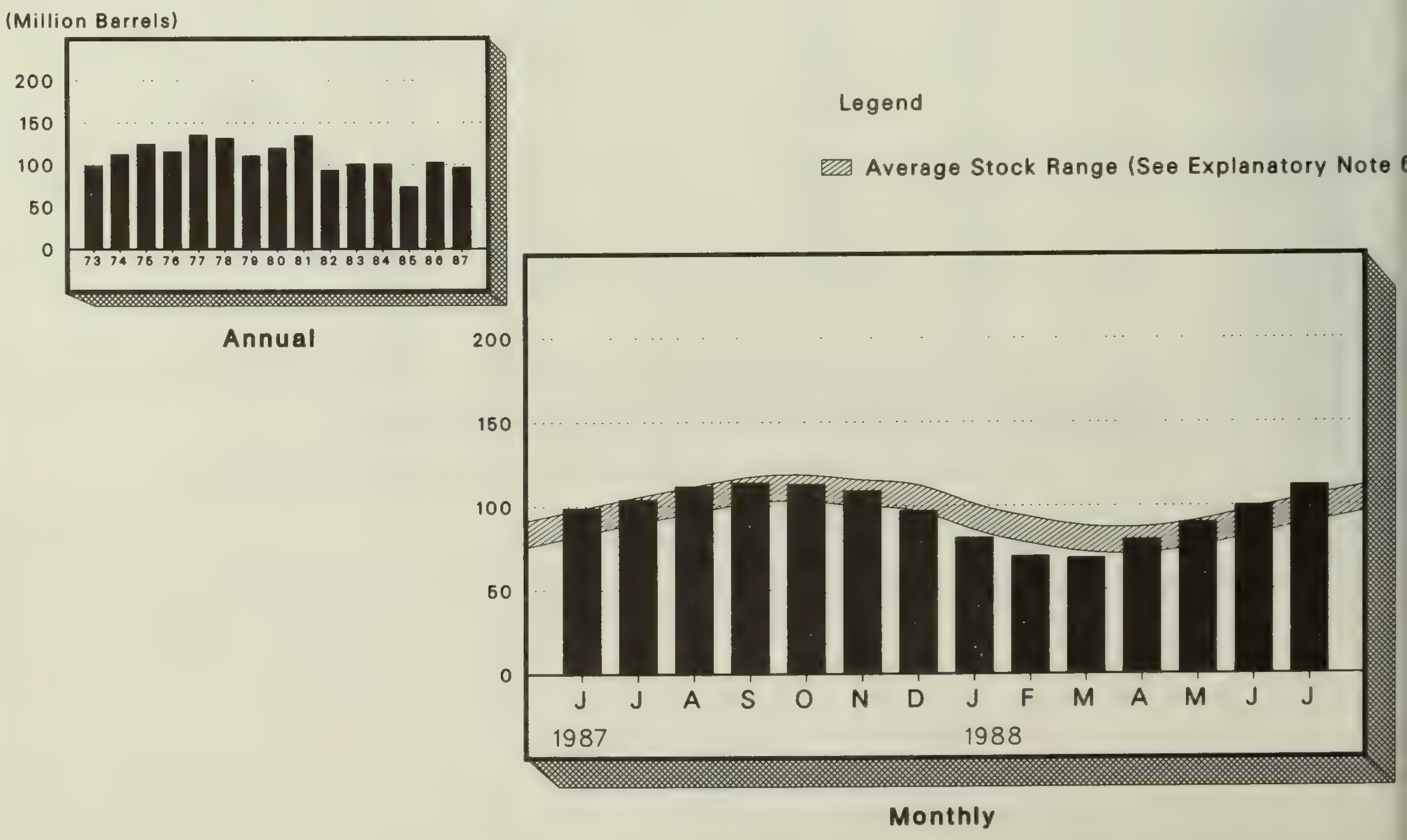
Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: See the last page of this section.

## Figure S11. Liquefied Petroleum Gases Supply and Disposition



## Figure S12. Liquefied Petroleum Gases Ending Stocks



# Table S7. Liquefied Petroleum Gases[1] Supply and Disposition

| | Supply | | | Disposition | | | |
|---|---|---|---|---|---|---|---|
| | Total Production | Imports | Stock Withdrawal[2] | Refinery Inputs | Exports | Product Supplied | Ending Stocks[3] |
| | Thousand Barrels per Day | | | | | | Million Barrels |
| 973 **Average** | **1,600** | **132** | -35 | 220 | 27 | 1,449 | 99 |
| 974 **Average** | **1,565** | **123** | -38 | 220 | 25 | 1,406 | [4]113 |
| 975 **Average** | **1,527** | **112** | [4]-35 | 246 | 26 | 1,333 | 125 |
| 976 **Average** | **1,535** | **130** | 24 | 260 | 25 | 1,404 | 116 |
| 977 **Average** | **1,566** | **161** | -55 | 233 | 18 | 1,422 | 136 |
| 978 **Average** | **1,537** | **123** | 12 | 239 | 20 | 1,413 | 132 |
| 979 **Average** | **1,556** | **217** | 70 | 236 | 15 | 1,592 | 111 |
| 980 **Average** | **1,535** | **216** | -27 | 233 | 21 | 1,469 | [4]120 |
| 981 **Average** | **1,571** | **244** | [4]-18 | 289 | 42 | 1,466 | 135 |
| 982 **Average** | **1,528** | **226** | 111 | 300 | 65 | 1,499 | [4]94 |
| 983 **Average** | **1,642** | **190** | [4]4 | 253 | 73 | 1,509 | [4]101 |
| 984 **Average** | **1,697** | **195** | [4]19 | 291 | 48 | 1,572 | 101 |
| 985 **Average** | **1,704** | **187** | 75 | 304 | 62 | 1,599 | 74 |
| 986 January | 1,850 | 280 | 80 | 364 | 47 | 1,800 | 71 |
| February | 1,815 | 208 | 108 | 325 | 74 | 1,733 | 68 |
| March | 1,693 | 202 | -98 | 250 | 47 | 1,500 | 71 |
| April | 1,642 | 134 | -200 | 256 | 33 | 1,286 | 77 |
| May | 1,685 | 196 | -336 | 267 | 40 | 1,238 | 87 |
| June | 1,649 | 253 | -490 | 228 | 25 | 1,158 | 102 |
| July | 1,684 | 303 | -450 | 199 | 50 | 1,287 | 116 |
| August | 1,619 | 271 | -332 | 243 | 53 | 1,262 | 126 |
| September | 1,631 | 282 | -142 | 288 | 27 | 1,456 | 131 |
| October | 1,625 | 234 | 249 | 332 | 26 | 1,750 | 123 |
| November | 1,724 | 310 | 254 | 417 | 53 | 1,817 | 115 |
| December | 1,725 | 227 | 411 | 456 | 33 | 1,875 | 103 |
| **Average** | **1,695** | **242** | **-80** | **302** | **42** | **1,512** | – |
| 1987 January | 1,751 | 183 | 500 | 419 | 43 | 1,971 | 87 |
| February | 1,762 | 201 | 205 | 341 | 38 | 1,789 | 81 |
| March | 1,761 | 132 | -10 | 282 | 52 | 1,550 | 82 |
| April | 1,775 | 149 | -121 | 274 | 36 | 1,493 | 85 |
| May | 1,732 | 142 | -283 | 269 | 34 | 1,288 | 94 |
| June | 1,732 | 119 | -175 | 255 | 22 | 1,400 | 99 |
| July | 1,764 | 190 | -145 | 244 | 30 | 1,534 | 104 |
| August | 1,717 | 198 | -259 | 252 | 33 | 1,372 | 112 |
| September | 1,736 | 288 | -81 | 266 | 56 | 1,622 | 114 |
| October | 1,736 | 233 | 59 | 294 | 23 | 1,711 | 113 |
| November | 1,763 | 233 | 129 | 356 | 35 | 1,735 | 109 |
| December | 1,753 | 214 | 372 | 395 | 56 | 1,887 | 97 |
| **Average** | **1,748** | **190** | **15** | **304** | **38** | **1,612** | – |
| 1988 January | 1,723 | 226 | 529 | 366 | 44 | 2,069 | 81 |
| February | 1,757 | 245 | 364 | 336 | 47 | 1,982 | 70 |
| March | 1,802 | 165 | 45 | 266 | 36 | 1,710 | 69 |
| April | 1,796 | 205 | -362 | 256 | 43 | 1,339 | 80 |
| May | 1,809 | 165 | -333 | 253 | 37 | 1,350 | 90 |
| June | 1,804 | 144 | -333 | 234 | 38 | 1,343 | 100 |
| July[*] | 1,831 | 233 | -384 | 228 | 35 | 1,416 | 112 |
| **7-Mo. Average** | **1,789** | **197** | **-69** | **277** | **40** | **1,600** | – |
| 1987 **7-Mo. Average** | **1,754** | **159** | **-6** | **297** | **36** | **1,573** | – |
| 1986 **7-Mo. Average** | **1,716** | **226** | **-201** | **269** | **45** | **1,426** | – |

---

[1] Includes ethane, propane, normal butane, and isobutane. Beginning in January 1984, unfractionated stream is reported by individual product.

[2] A negative number indicates an increase in stocks and a positive number indicates a decrease.

[3] Stocks are totals as of end of period.

[4] In January 1975, 1981, 1983, and 1984, a new stock basis was established affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10.

[*] See Explanatory Note 9.5.

Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: See the last page of this section.

# Table S8. Other Petroleum Products[1] Supply and Disposition

| | | Supply | | | Disposition | | | |
|---|---|---|---|---|---|---|---|---|
| | | Total Production | Imports | Stock Withdrawal[2] | Refinery Inputs | Exports | Product Supplied | Ending Stocks[3] |
| | | Thousand Barrels per Day | | | | | | Million Barrels |
| **1973** | **Average** | **3,693** | **502** | **-9** | **750** | **166** | **3,270** | **208** |
| **1974** | **Average** | **3,558** | **432** | **-28** | **665** | **174** | **3,123** | **[4] 218** |
| **1975** | **Average** | **3,418** | **277** | **[4] 4** | **537** | **160** | **3,002** | **219** |
| **1976** | **Average** | **3,643** | **206** | **-5** | **524** | **175** | **3,145** | **220** |
| **1977** | **Average** | **3,912** | **205** | **-27** | **514** | **165** | **3,410** | **230** |
| **1978** | **Average** | **4,046** | **166** | **14** | **492** | **167** | **3,568** | **225** |
| **1979** | **Average** | **4,153** | **195** | **-37** | **352** | **209** | **3,749** | **238** |
| **1980** | **Average** | **3,956** | **210** | **-23** | **311** | **198** | **3,634** | **[4] 247** |
| **1981** | **Average** | **3,739** | **226** | **[4] 46** | **723** | **199** | **3,088** | **282** |
| **1982** | **Average** | **3,453** | **334** | **80** | **787** | **211** | **2,869** | **[4] 253** |
| **1983** | **Average** | **3,460** | **411** | **[4] 6** | **712** | **242** | **2,923** | **[4] 256** |
| **1984** | **Average** | **3,632** | **565** | **[4] 23** | **791** | **245** | **3,183** | **240** |
| **1985** | **Average** | **3,721** | **588** | **-17** | **886** | **240** | **3,166** | **246** |
| **1986** | January | 3,902 | 541 | [5] -172 | 967 | 311 | 2,993 | 252 |
| | February | 3,868 | 393 | -209 | 747 | 270 | 3,035 | [5] 258 |
| | March | 3,754 | 454 | [5] 21 | 854 | 208 | 3,167 | 257 |
| | April | 3,788 | 638 | -100 | 760 | 369 | 3,196 | 260 |
| | May | 4,055 | 659 | -114 | 810 | 298 | 3,492 | [5] 264 |
| | June | 4,209 | 687 | [5] -70 | 853 | 263 | 3,710 | 266 |
| | July | 4,145 | 589 | [5] 119 | 1,064 | 357 | 3,432 | 262 |
| | August | 4,223 | 572 | 335 | 1,061 | 301 | 3,768 | [5] 252 |
| | September | 4,225 | 571 | [5] 35 | 846 | 278 | 3,708 | [5] 251 |
| | October | 3,969 | 575 | [5] -112 | 666 | 375 | 3,391 | 254 |
| | November | 3,904 | 559 | [5] 36 | 940 | 342 | 3,217 | 253 |
| | December | 3,920 | 490 | [5] 90 | 1,069 | 325 | 3,105 | 250 |
| | **Average** | **3,997** | **561** | **-10** | **888** | **308** | **3,353** | -- |
| **1987** | January | 3,852 | 469 | -121 | 659 | 219 | 3,323 | 254 |
| | February | 3,796 | 687 | -389 | 352 | 320 | 3,422 | 265 |
| | March | 3,766 | 663 | -128 | 757 | 281 | 3,262 | 269 |
| | April | 3,933 | 589 | 107 | 872 | 254 | 3,502 | 266 |
| | May | 4,049 | 529 | 178 | 913 | 320 | 3,523 | 260 |
| | June | 4,203 | 712 | 158 | 896 | 320 | 3,857 | 255 |
| | July | 4,363 | 550 | 91 | 835 | 256 | 3,913 | 253 |
| | August | 4,340 | 616 | -148 | 693 | 238 | 3,876 | 257 |
| | September | 4,350 | 611 | -24 | 903 | 353 | 3,681 | 258 |
| | October | 4,223 | 686 | 14 | 971 | 272 | 3,680 | 258 |
| | November | 4,010 | 583 | -20 | 975 | 305 | 3,294 | 258 |
| | December | 4,050 | 633 | 261 | 1,091 | 330 | 3,523 | 250 |
| | **Average** | **4,080** | **610** | **1** | **829** | **289** | **3,572** | -- |
| **1988** | January | 3,988 | 639 | -143 | 785 | 354 | 3,345 | 254 |
| | February | 3,941 | 570 | -35 | 726 | 318 | 3,433 | 255 |
| | March | 4,175 | 603 | -269 | 656 | 328 | 3,525 | 264 |
| | April | 4,052 | 697 | -97 | 832 | 288 | 3,533 | 267 |
| | May | 4,097 | 752 | -341 | 471 | 274 | 3,763 | 277 |
| | June | 4,278 | 703 | 76 | 759 | 379 | 3,920 | 275 |
| | July* | 4,333 | 652 | -20 | 824 | 329 | 3,812 | 276 |
| | **7-Mo. Average** | **4,125** | **660** | **-120** | **721** | **324** | **3,619** | -- |
| **1987** | **7-Mo. Average** | **3,997** | **598** | **-11** | **759** | **281** | **3,544** | -- |
| **1986** | **7-Mo. Average** | **3,961** | **567** | **-73** | **868** | **297** | **3,291** | -- |

[1] Includes pentanes plus, other hydrocarbons and alcohol, unfinished oils, gasoline blending components and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil, and liquefied petroleum gases.

[2] A negative number indicates an increase in stocks and a positive number indicates a decrease.

[3] Stocks are totals as of end of period.

[4] In January 1975, 1981, 1983, and 1984, a new stock basis was established affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10.

[5] Ending stocks and stock withdrawal for 1986 are slightly different from those published in the 1986 *Petroleum Supply Annual* (PSA)-- Volume 1. PSA statistics inadvertently omitted stocks of other hydrocarbons and alcohol.

* See Explanatory Note 9.6.

Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: See the last page of this section.

# Sources of Summary Statistics

1973 through 1976: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys, Petroleum Statement, Annual* and *PAD Districts Supply/Demand, Annual.*

1977 through 1980: U.S. Department of Energy, Energy Information Administration (EIA), *Energy Data Reports, Petroleum Statement, Annual* and *PAD Districts Supply/Demand, Annual*, and unleaded gasoline data from *Monthly Petroleum Statistics Report.*

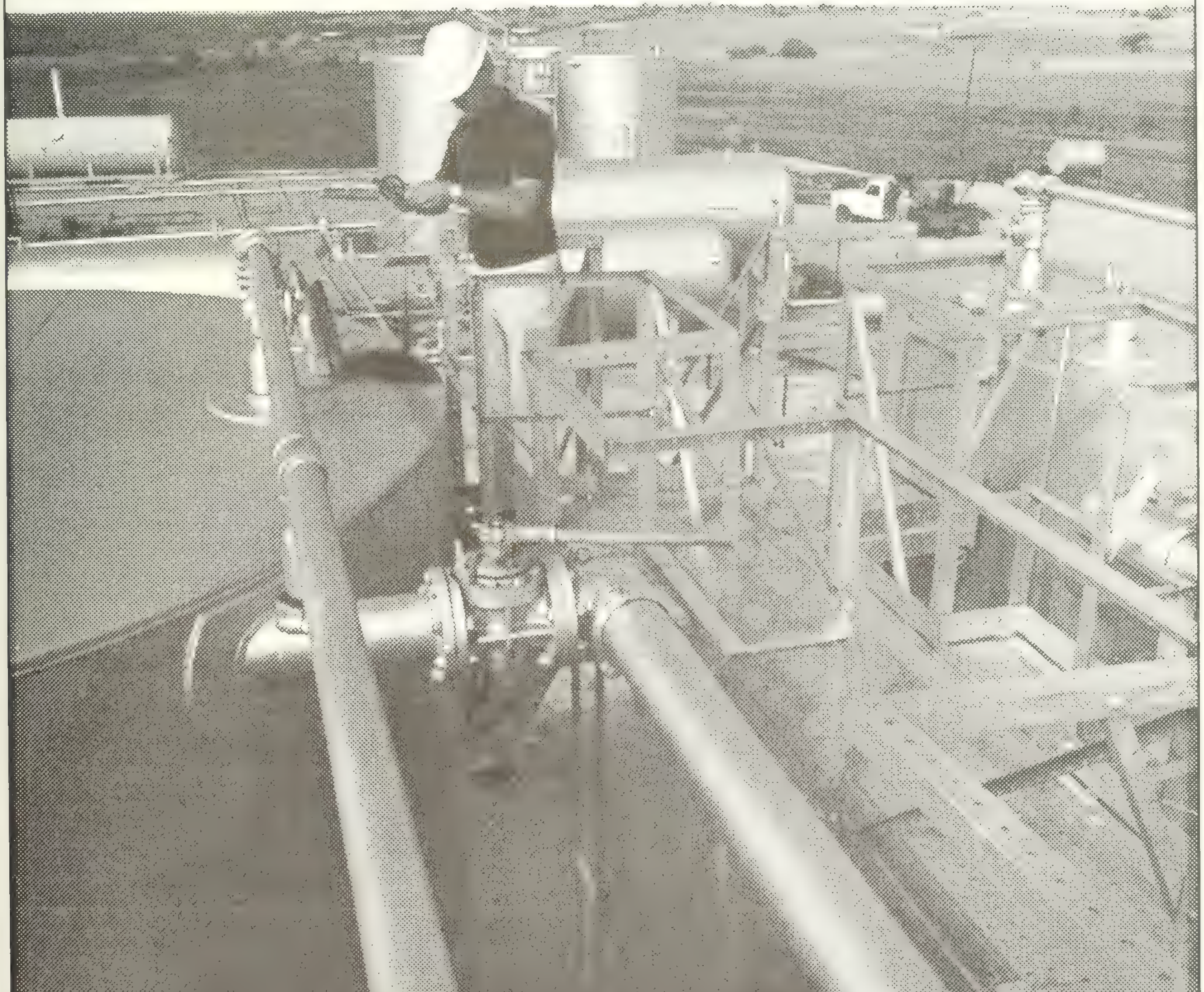
1981 through 1987: EIA, *Petroleum Supply Annual.*

January 1988 through July 1988: Detailed Statistics in appropriate issues of the *Petroleum Supply Monthly.* (See Explanatory Notes 9.1 through 9.6.)

August 1988: Estimates based on EIA weekly data (except domestic crude oil production). (See Explanatory Note 1.1.)

January 1988 through August 1988: Domestic crude oil production estimate based on historical statistics from State conservation agencies and the U.S. Geological Survey. (See Explanatory Note 3.)

# Detailed Statistics



## Table 1. U.S. Petroleum Balance, July 1988

| | | Current Month | | Year to Date | |
|---|---|---|---|---|---|
| | | Thousand Barrels | Thousand Barrels per Day | Thousand Barrels | Thousand Barrels per Day |
| | Crude Oil (Including Lease Condensate) | | | | |
| | Field Production | | | | |
| (1) | Alaska | E 60,766 | E 1,960 | E 430,314 | E 2,020 |
| (2) | Lower 48 States | E 189,054 | E 6,099 | E 1,323,801 | E 6,215 |
| (3) | Total U.S. | E 249,820 | E 8,059 | E 1,754,115 | E 8,235 |
| | Net Imports | | | | |
| (4) | Imports (Gross Excluding SPR) | 153,911 | 4,965 | 1,040,013 | 4,883 |
| (5) | SPR Imports | 1,290 | 42 | 10,605 | 50 |
| (6) | Exports | 5,907 | 191 | 35,670 | 167 |
| (7) | Imports (Net Including SPR) | 149,294 | 4,816 | 1,014,948 | 4,765 |
| | Other Sources | | | | |
| (8) | SPR Withdrawal (+) or Addition (-) | -1,288 | -42 | -10,696 | -50 |
| (9) | Other Stock Withdrawal (+) or Addition (-) | 9,671 | 312 | -41 | 0 |
| (10) | Product Supplied and Losses | -905 | -29 | -8,426 | -40 |
| (11) | Unaccounted for [1] | 16,976 | 548 | 68,351 | 321 |
| (12) | Total Other Sources | 24,454 | 789 | 49,188 | 231 |
| (13) | Crude Input to Refineries<br>(13) = (3) + (7) + (12) | 423,568 | 13,663 | 2,818,251 | 13,231 |
| | Natural Gas Plant Liquids (NGPL) | | | | |
| (14) | Field Production | 49,893 | 1,609 | 342,008 | 1,606 |
| (15) | Net Imports [2] | -26 | -1 | 1,719 | 8 |
| (16) | Stock Withdrawal (+) or Addition (-) [2] | -372 | -12 | -2,730 | -13 |
| (17) | Total NGPL Supply | 49,495 | 1,597 | 340,997 | 1,601 |
| | Other Liquids | | | | |
| | Unfinished Oils and Gasoline Blending Components, Total | | | | |
| (18) | Stock Withdrawal (+) or Addition (-) | 654 | 21 | -18,816 | -88 |
| (19) | Imports | 14,650 | 473 | 90,216 | 424 |
| (20) | Other Hydrocarbons and Alcohol New Supply (Field Production) | 1,860 | 60 | 12,180 | 57 |
| (21) | Refinery Processing Gain [1] | 19,632 | 633 | 141,749 | 665 |
| (22) | Crude Oil Product Supplied | 890 | 29 | 8,388 | 39 |
| (23) | Total Other Liquids<br>(23) = (18) through (22) | 37,686 | 1,216 | 233,717 | 1,097 |
| (24) | Total Production of Products [3]<br>(24) = (13) + (17) + (23) | 510,749 | 16,476 | 3,392,965 | 15,929 |
| | Net Imports of Refined Products [3] | | | | |
| (25) | Imports (Gross) | 46,940 | 1,514 | 340,905 | 1,600 |
| (26) | Exports | 19,776 | 638 | 142,336 | 668 |
| (27) | Imports (Net) | 27,164 | 876 | 198,568 | 932 |
| (28) | Total New Supply of Products<br>(28) = (24) + (27) | 537,913 | 17,352 | 3,591,534 | 16,862 |
| (29) | Refined Products Stock Withdrawal (+) or Addition (-) [3] | -24,723 | -798 | 13,449 | 63 |
| (30) | Total Petroleum Products Supplied for Domestic Use<br>(30) = (28) + (29) | 513,190 | 16,555 | 3,604,983 | 16,925 |
| (31) | Finished Motor Gasoline | 231,675 | 7,473 | 1,549,071 | 7,273 |
| (32) | Distillate Fuel Oil | 82,060 | 2,647 | 658,911 | 3,093 |
| (33) | Residual Fuel Oil | 36,499 | 1,177 | 276,822 | 1,300 |
| (34) | Liquefied Petroleum Gases | 43,897 | 1,416 | 340,863 | 1,600 |
| (35) | Other [4] | 118,169 | 3,812 | 770,927 | 3,619 |
| (36) | Crude Oil | 890 | 29 | 8,388 | 39 |
| (37) | Total Product Supplied<br>(37) = (31) through (36) | 513,190 | 16,555 | 3,604,983 | 16,925 |
| | Ending Stocks, All Oils | | | | |
| (38) | Crude Oil and Lease Condensate (Excluding SPR) | 349,330 | -- | 349,330 | -- |
| (39) | Strategic Petroleum Reserve (SPR) | 551,344 | -- | 551,344 | -- |
| (40) | Unfinished Oils | 113,600 | -- | 113,600 | -- |
| (41) | Gasoline Blending Components [5] | 36,485 | -- | 36,485 | -- |
| (42) | Pentanes Plus | 9,761 | -- | 9,761 | -- |
| (43) | Finished Refined Products [3] | 566,165 | -- | 566,165 | -- |
| (44) | Total Stocks | 1,626,685 | -- | 1,626,685 | -- |

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[1] A balancing item.

[2] Includes products in the pentanes plus category only.

[3] For products included see Explanatory Note 9.7.

[4] Includes pentanes plus, other liquids, and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil and liquefied petroleum gases.

[5] Includes other hydrocarbons and alcohol.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1, 2 and 9.7.

## Table 2. Supply and Disposition of Crude Oil and Petroleum Products, July 1988
(Thousand Barrels)

| Commodity | Supply | | | | | Disposition | | | | Ending Stocks |
|---|---|---|---|---|---|---|---|---|---|---|
| | Field Production | Refinery Production | Imports | Stock Withdrawal (+) or Addition (-) | Unaccounted For Crude Oil[1] | Crude Losses | Refinery Inputs | Exports | Products Supplied | |
| **Crude Oil (including lease condensate)** | E **249,820** | **0** | **155,201** | **8,383** | **16,976** | **15** | **423,568** | **5,907** | **890** | **900,674** |
| **Natural Gas Liquids and LRGs** | **49,791** | **16,575** | **7,260** | **-12,290** | **0** | **0** | **11,994** | **1,160** | **48,182** | **121,667** |
| Pentanes Plus | 9,620 | 0 | 37 | -372 | 0 | 0 | 4,937 | 63 | 4,285 | 9,761 |
| Liquefied Petroleum Gases | 40,171 | 16,575 | 7,223 | -11,918 | 0 | 0 | 7,057 | 1,097 | 43,897 | 111,906 |
| Ethane | 15,273 | 422 | 8 | -70 | 0 | 0 | 55 | 130 | 15,448 | 18,689 |
| Propane | 15,261 | 11,243 | 3,903 | -6,770 | 0 | 0 | 261 | 628 | 22,748 | 57,904 |
| Normal Butane | 5,069 | 4,330 | 2,148 | -4,647 | 0 | 0 | 2,056 | 276 | 4,568 | 24,852 |
| Isobutane | 4,568 | 580 | 1,164 | -431 | 0 | 0 | 4,685 | 63 | 1,133 | 10,461 |
| **Other Liquids** | **1,860** | **0** | **14,650** | **654** | **0** | **0** | **20,613** | **0** | **-3,449** | **150,085** |
| Other Hydrocarbons and Alcohol | 1,860 | 0 | 0 | 56 | 0 | 0 | 1,916 | 0 | 0 | 344 |
| Unfinished Oils | 0 | 0 | 12,390 | 1,352 | 0 | 0 | 16,611 | 0 | -2,869 | 113,600 |
| Motor Gasoline Blending Components | 0 | 0 | 2,260 | -603 | 0 | 0 | 2,108 | 0 | -451 | 35,809 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | -151 | 0 | 0 | -22 | 0 | -129 | 332 |
| **Finished Petroleum Products** | **102** | **459,232** | **39,716** | **-12,805** | **0** | **0** | **0** | **18,679** | **467,567** | **454,259** |
| Finished Motor Gasoline | 10 | 221,925 | 14,290 | -4,185 | 0 | 0 | 0 | 365 | 231,675 | 177,948 |
| Finished Leaded Motor Gasoline | 9 | 43,220 | 250 | -1,513 | 0 | 0 | 0 | 199 | 41,767 | 44,454 |
| Finished Unleaded Motor Gasoline | 1 | 178,705 | 14,040 | -2,672 | 0 | 0 | 0 | 166 | 189,908 | 133,494 |
| Finished Aviation Gasoline | 0 | 1,001 | 6 | 22 | 0 | 0 | 0 | 0 | 1,029 | 1,783 |
| Naphtha-Type Jet Fuel | 0 | 6,467 | 98 | 40 | 0 | 0 | 0 | 0 | 6,605 | 6,710 |
| Kerosene-Type Jet Fuel | 0 | 35,793 | 2,426 | -1,307 | 0 | 0 | 0 | 107 | 36,805 | 40,297 |
| Kerosene | 0 | 1,984 | 13 | -237 | 0 | 0 | 0 | 6 | 1,754 | 6,200 |
| Distillate Fuel Oil | 42 | 86,217 | 6,369 | -8,772 | 0 | 0 | 0 | 1,796 | 82,060 | 119,434 |
| Residual Fuel Oil | 0 | 28,307 | 13,531 | 1,051 | 0 | 0 | 0 | 6,390 | 36,499 | 41,072 |
| Naphtha < 400 Deg. for Petro. Feed. Use | 0 | 3,393 | 1,226 | -141 | 0 | 0 | 0 | 203 | 4,275 | 2,291 |
| Other Oils > 400 Deg. for Petro. Feed. Use | 0 | 7,505 | 0 | -108 | 0 | 0 | 0 | 323 | 7,074 | 2,250 |
| Special Naphthas | 0 | 1,736 | 209 | 54 | 0 | 0 | 0 | 283 | 1,716 | 3,640 |
| Lubricants | 0 | 5,227 | 312 | -126 | 0 | 0 | 0 | 753 | 4,660 | 14,023 |
| Waxes | 0 | 596 | 50 | -103 | 0 | 0 | 0 | 90 | 453 | 902 |
| Petroleum Coke | 0 | 16,632 | 43 | -291 | 0 | 0 | 0 | 8,264 | 8,120 | 8,470 |
| Asphalt and Road Oil | 0 | 18,611 | 1,055 | 1,384 | 0 | 0 | 0 | 43 | 21,007 | 25,590 |
| Still Gas | 0 | 21,799 | 0 | 0 | 0 | 0 | 0 | 0 | 21,799 | 0 |
| Miscellaneous Products | 50 | 2,039 | 88 | -86 | 0 | 0 | 0 | 54 | 2,037 | 3,649 |
| **Total** | **301,573** | **475,807** | **216,828** | **-16,058** | **16,976** | **15** | **456,175** | **25,746** | **513,190** | **1,626,685** |

[1] Unaccounted for crude oil is a balancing item.

(s) = Less than 500 barrels.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

(Thousand Barrels)

| Commodity | Supply |  |  |  |  | Disposition |  |  |  | Ending Stocks |
|---|---|---|---|---|---|---|---|---|---|---|
|  | Field Production | Refinery Production | Imports | Stock Withdrawal (+) or Addition (-) | Unaccounted For Crude Oil[1] | Crude Losses | Refinery Inputs | Exports | Products Supplied |  |
| **Crude Oil (including lease condensate)** | E **1,754,115** | **0** | **1,050,618** | **-10,737** | **68,351** | **38** | **2,818,251** | **35,670** | **8,388** | **900,674** |
| **Natural Gas Liquids and LRGs** | **341,175** | **103,978** | **44,147** | **-17,484** | **0** | **0** | **92,344** | **8,943** | **370,529** | **121,667** |
| Pentanes Plus | 64,095 | 0 | 2,150 | -2,730 | 0 | 0 | 33,419 | 431 | 29,665 | 9,761 |
| Liquefied Petroleum Gases | 277,080 | 103,978 | 41,997 | -14,754 | 0 | 0 | 58,925 | 8,512 | 340,863 | 111,906 |
| Ethane | 102,676 | 1,946 | 244 | 3,570 | 0 | 0 | 430 | 869 | 107,137 | 18,689 |
| Propane | 108,036 | 73,444 | 21,924 | -10,055 | 0 | 0 | 1,710 | 5,028 | 186,611 | 57,904 |
| Normal Butane | 35,599 | 25,555 | 12,458 | -8,304 | 0 | 0 | 27,211 | 2,185 | 35,912 | 24,852 |
| Isobutane | 30,769 | 3,033 | 7,371 | 35 | 0 | 0 | 29,574 | 431 | 11,203 | 10,461 |
| **Other Liquids** | **12,180** | **0** | **90,216** | **-18,816** | **0** | **0** | **120,171** | **0** | **-36,591** | **150,085** |
| Other Hydrocarbons and Alcohol | 12,180 | 0 | 0 | 88 | 0 | 0 | 12,268 | 0 | 0 | 344 |
| Unfinished Oils | 0 | 0 | 77,864 | -20,415 | 0 | 0 | 86,530 | 0 | -29,081 | 113,600 |
| Motor Gasoline Blending Components | 0 | 0 | 12,352 | 1,587 | 0 | 0 | 21,250 | 0 | -7,311 | 35,809 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | -76 | 0 | 0 | 123 | 0 | -199 | 332 |
| **Finished Petroleum Products** | **833** | **3,068,537** | **298,908** | **28,203** | **0** | **0** | **0** | **133,824** | **3,262,657** | **454,259** |
| Finished Motor Gasoline | 68 | 1,462,093 | 80,834 | 10,946 | 0 | 0 | 0 | 4,870 | 1,549,071 | 177,948 |
| Finished Leaded Motor Gasoline | 61 | 289,522 | 3,130 | 8,741 | 0 | 0 | 0 | 1,497 | 299,957 | 44,454 |
| Finished Unleaded Motor Gasoline | 7 | 1,172,571 | 77,704 | 2,205 | 0 | 0 | 0 | 3,373 | 1,249,114 | 133,494 |
| Finished Aviation Gasoline | 0 | 5,196 | 113 | 548 | 0 | 0 | 0 | 0 | 5,857 | 1,783 |
| Naphtha-Type Jet Fuel | 0 | 43,241 | 620 | 1,246 | 0 | 0 | 0 | 101 | 45,006 | 6,710 |
| Kerosene-Type Jet Fuel | 0 | 246,891 | 17,429 | 1,674 | 0 | 0 | 0 | 6,205 | 259,789 | 40,297 |
| Kerosene | 0 | 15,364 | 2,583 | 2,247 | 0 | 0 | 0 | 202 | 19,992 | 6,200 |
| Distillate Fuel Oil | 316 | 605,043 | 54,076 | 15,048 | 0 | 0 | 0 | 15,572 | 658,911 | 119,434 |
| Residual Fuel Oil | 0 | 199,559 | 115,765 | 6,265 | 0 | 0 | 0 | 44,767 | 276,822 | 41,072 |
| Naphtha < 400 Deg. for Petro. Feed Use | 0 | 26,530 | 14,079 | 45 | 0 | 0 | 0 | 989 | 39,665 | 2,291 |
| Other Oils > 400 Deg. for Petro. Feed. Use | 0 | 47,769 | 759 | -649 | 0 | 0 | 0 | 3,582 | 44,297 | 2,250 |
| Special Naphthas | 0 | 11,998 | 3,001 | 13 | 0 | 0 | 0 | 1,176 | 13,836 | 3,640 |
| Lubricants | 0 | 37,726 | 2,354 | -706 | 0 | 0 | 0 | 5,344 | 34,030 | 14,023 |
| Waxes | 0 | 3,721 | 355 | -119 | 0 | 0 | 0 | 340 | 3,617 | 902 |
| Petroleum Coke | 0 | 115,790 | 267 | -1,710 | 0 | 0 | 0 | 50,159 | 64,188 | 8,470 |
| Asphalt and Road Oil | 0 | 88,815 | 6,297 | -6,791 | 0 | 0 | 0 | 130 | 88,191 | 25,590 |
| Still Gas | 0 | 143,862 | 0 | 0 | 0 | 0 | 0 | 0 | 143,862 | 0 |
| Miscellaneous Products | 449 | 14,939 | 376 | 146 | 0 | 0 | 0 | 389 | 15,521 | 3,649 |
| **Total** | 2,108,303 | 3,172,515 | 1,483,889 | -18,834 | 68,351 | 38 | 3,030,766 | 178,438 | 3,604,983 | 1,626,685 |

[1] Unaccounted for crude oil is a balancing item.

(s) = Less than 500 barrels

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2

## Table 4. Daily Average Supply and Disposition of Crude Oil and Petroleum Products, July 1988
(Thousand Barrels per Day)

| Commodity | Supply | | | | | Disposition | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Field Production | Refinery Production | Imports | Stock Withdrawal (+) or Addition (-) | Unaccounted For Crude Oil[1] | Crude Losses | Refinery Inputs | Exports | Products Supplied |
| **Crude Oil (including lease condensate)** | E 8,059 | 0 | 5,006 | 270 | 548 | (s) | 13,663 | 191 | 29 |
| **Natural Gas Liquids and LRGs** | **1,606** | **535** | **234** | **-396** | **0** | **0** | **387** | **37** | **1,554** |
| Pentanes Plus | 310 | 0 | 1 | -12 | 0 | 0 | 159 | 2 | 138 |
| Liquefied Petroleum Gases | 1,296 | 535 | 233 | -384 | 0 | 0 | 228 | 35 | 1,416 |
| Ethane | 493 | 14 | (s) | -2 | 0 | 0 | 2 | 4 | 498 |
| Propane | 492 | 363 | 126 | -218 | 0 | 0 | 8 | 20 | 734 |
| Normal Butane | 164 | 140 | 69 | -150 | 0 | 0 | 66 | 9 | 147 |
| Isobutane | 147 | 19 | 38 | -14 | 0 | 0 | 151 | 2 | 37 |
| **Other Liquids** | **60** | **0** | **473** | **21** | **0** | **0** | **665** | **0** | **-111** |
| Other Hydrocarbons and Alcohol | 60 | 0 | 0 | 2 | 0 | 0 | 62 | 0 | 0 |
| Unfinished Oils | 0 | 0 | 400 | 44 | 0 | 0 | 536 | 0 | -93 |
| Motor Gasoline Blending Components | 0 | 0 | 73 | -19 | 0 | 0 | 68 | 0 | -15 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | -5 | 0 | 0 | -1 | 0 | -4 |
| **Finished Petroleum Products** | **3** | **14,814** | **1,281** | **-413** | **0** | **0** | **0** | **603** | **15,083** |
| Finished Motor Gasoline | (s) | 7,159 | 461 | -135 | 0 | 0 | 0 | 12 | 7,473 |
| Finished Leaded Motor Gasoline | (s) | 1,394 | 8 | -49 | 0 | 0 | 0 | 6 | 1,347 |
| Finished Unleaded Motor Gasoline | (s) | 5,765 | 453 | -86 | 0 | 0 | 0 | 5 | 6,126 |
| Finished Aviation Gasoline | 0 | 32 | (s) | 1 | 0 | 0 | 0 | 0 | 33 |
| Naphtha-Type Jet Fuel | 0 | 209 | 3 | 1 | 0 | 0 | 0 | 0 | 213 |
| Kerosene-Type Jet Fuel | 0 | 1,155 | 78 | -42 | 0 | 0 | 0 | 3 | 1,187 |
| Kerosene | 0 | 64 | (s) | -8 | 0 | 0 | 0 | (s) | 57 |
| Distillate Fuel Oil | 1 | 2,781 | 205 | -283 | 0 | 0 | 0 | 58 | 2,647 |
| Residual Fuel Oil | 0 | 913 | 436 | 34 | 0 | 0 | 0 | 206 | 1,177 |
| Naphtha < 400 Deg. for Petro. Feed. Use | 0 | 109 | 40 | -5 | 0 | 0 | 0 | 7 | 138 |
| Other Oils > 400 Deg. for Petro. Feed. Use | 0 | 242 | 0 | -3 | 0 | 0 | 0 | 10 | 228 |
| Special Naphthas | 0 | 56 | 7 | 2 | 0 | 0 | 0 | 9 | 55 |
| Lubricants | 0 | 169 | 10 | -4 | 0 | 0 | 0 | 24 | 150 |
| Waxes | 0 | 19 | 2 | -3 | 0 | 0 | 0 | 3 | 15 |
| Petroleum Coke | 0 | 537 | 1 | -9 | 0 | 0 | 0 | 267 | 262 |
| Asphalt and Road Oil | 0 | 600 | 34 | 45 | 0 | 0 | 0 | 1 | 678 |
| Still Gas | 0 | 703 | 0 | 0 | 0 | 0 | 0 | 0 | 703 |
| Miscellaneous Products | 2 | 66 | 3 | -3 | 0 | 0 | 0 | 2 | 66 |
| **Total** | **9,728** | **15,349** | **6,994** | **-518** | **548** | (s) | **14,715** | **831** | **16,555** |

[1] Unaccounted for crude oil is a balancing item.

(s) = Less than 500 barrels per day.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

(Thousand Barrels per Day)

| Commodity | Supply | | | | | Disposition | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Field Production | Refinery Production | Imports | Stock Withdrawal (+) or Addition (-) | Unaccounted For Crude Oil[1] | Crude Losses | Refinery Inputs | Exports | Products Supplied |
| **Crude Oil (including lease condensate)** | E **8,235** | **0** | **4,932** | **-50** | **321** | (s) | **13,231** | **167** | **39** |
| **Natural Gas Liquids and LRGs** | **1,602** | **488** | **207** | **-82** | **0** | **0** | **434** | **42** | **1,740** |
| Pentanes Plus | 301 | 0 | 10 | -13 | 0 | 0 | 157 | 2 | 139 |
| Liquefied Petroleum Gases | 1,301 | 488 | 197 | -69 | 0 | 0 | 277 | 40 | 1,600 |
| Ethane | 482 | 9 | 1 | 17 | 0 | 0 | 2 | 4 | 503 |
| Propane | 507 | 345 | 103 | -47 | 0 | 0 | 8 | 24 | 876 |
| Normal Butane | 167 | 120 | 58 | -39 | 0 | 0 | 128 | 10 | 169 |
| Isobutane | 144 | 14 | 35 | (s) | 0 | 0 | 139 | 2 | 53 |
| **Other Liquids** | **57** | **0** | **424** | **-88** | **0** | **0** | **564** | **0** | **-172** |
| Other Hydrocarbons and Alcohol | 57 | 0 | 0 | (s) | 0 | 0 | 58 | 0 | 0 |
| Unfinished Oils | 0 | 0 | 366 | -96 | 0 | 0 | 406 | 0 | -137 |
| Motor Gasoline Blending Components | 0 | 0 | 58 | 7 | 0 | 0 | 100 | 0 | -34 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | (s) | 0 | 0 | 1 | 0 | -1 |
| **Finished Petroleum Products** | **4** | **14,406** | **1,403** | **132** | **0** | **0** | **0** | **628** | **15,318** |
| Finished Motor Gasoline | (s) | 6,864 | 380 | 51 | 0 | 0 | 0 | 23 | 7,273 |
| Finished Leaded Motor Gasoline | (s) | 1,359 | 15 | 41 | 0 | 0 | 0 | 7 | 1,408 |
| Finished Unleaded Motor Gasoline | (s) | 5,505 | 365 | 10 | 0 | 0 | 0 | 16 | 5,864 |
| Finished Aviation Gasoline | 0 | 24 | 1 | 3 | 0 | 0 | 0 | 0 | 27 |
| Naphtha-Type Jet Fuel | 0 | 203 | 3 | 6 | 0 | 0 | 0 | (s) | 211 |
| Kerosene-Type Jet Fuel | 0 | 1,159 | 82 | 8 | 0 | 0 | 0 | 29 | 1,220 |
| Kerosene | 0 | 72 | 12 | 11 | 0 | 0 | 0 | 1 | 94 |
| Distillate Fuel Oil | 1 | 2,841 | 254 | 71 | 0 | 0 | 0 | 73 | 3,093 |
| Residual Fuel Oil | 0 | 937 | 543 | 29 | 0 | 0 | 0 | 210 | 1,300 |
| Naphtha < 400 Deg. for Petro. Feed Use | 0 | 125 | 66 | (s) | 0 | 0 | 0 | 5 | 186 |
| Other Oils > 400 Deg. for Petro. Feed. Use | 0 | 224 | 4 | -3 | 0 | 0 | 0 | 17 | 208 |
| Special Naphthas | 0 | 56 | 14 | (s) | 0 | 0 | 0 | 6 | 65 |
| Lubricants | 0 | 177 | 11 | -3 | 0 | 0 | 0 | 25 | 160 |
| Waxes | 0 | 17 | 2 | -1 | 0 | 0 | 0 | 2 | 17 |
| Petroleum Coke | 0 | 544 | 1 | -8 | 0 | 0 | 0 | 235 | 301 |
| Asphalt and Road Oil | 0 | 417 | 30 | -32 | 0 | 0 | 0 | 1 | 414 |
| Still Gas | 0 | 675 | 0 | 0 | 0 | 0 | 0 | 0 | 675 |
| Miscellaneous Products | 2 | 70 | 2 | 1 | 0 | 0 | 0 | 2 | 73 |
| **Total** | **9,898** | **14,894** | **6,967** | **-88** | **321** | (s) | **14,229** | **838** | **16,925** |

[1] Unaccounted for crude oil is a balancing item.

(s) = Less than 500 barrels per day.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 6. PAD District I--Supply and Disposition of Crude Oil and Petroleum Products, July 1988
(Thousand Barrels)

| Commodity | Supply | | | | | | Disposition | | | | Ending Stocks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Field Production | Refinery Production | Imports by PADD of Entry | Stock Withdrawal (+) or Addition (-) | Unaccounted For Crude Oil[1] | Net Receipts | Crude Losses | Refinery Inputs | Exports | Products Supplied | |
| **Crude Oil (including lease condensate)** | E **1,147** | **0** | **35,162** | **2,411** | **2,778** | **2,050** | **0** | **43,548** | **0** | **0** | **15,136** |
| **Natural Gas Liquids and LRGs** | **843** | **1,857** | **1,050** | **-776** | **0** | **1,932** | **0** | **110** | **34** | **4,762** | **4,849** |
| Liquefied Petroleum Gases | 712 | 1,857 | 1,050 | -776 | 0 | 1,932 | 0 | 81 | 34 | 4,660 | 4,801 |
| Pentanes Plus | 131 | 0 | 0 | 0 | 0 | 0 | 0 | 29 | 0 | 102 | 48 |
| **Other Liquids** | **37** | **0** | **6,339** | **-1,600** | **0** | **409** | **0** | **6,039** | **0** | **-854** | **18,748** |
| Other Hydrocarbons and Alcohol | 37 | 0 | 0 | -1 | 0 | 0 | 0 | 36 | 0 | 0 | 11 |
| Unfinished Oils | 0 | 0 | 4,362 | -794 | 0 | 177 | 0 | 4,761 | 0 | -1,016 | 13,643 |
| Motor Gasoline Blending Components | 0 | 0 | 1,977 | -805 | 0 | 232 | 0 | 1,242 | 0 | 162 | 5,094 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Finished Petroleum Products** | **0** | **50,128** | **33,643** | **-8,437** | **0** | **68,913** | **0** | **0** | **938** | **143,309** | **144,237** |
| Finished Motor Gasoline | 0 | 22,827 | 12,092 | -1,623 | 0 | 42,226 | 0 | 0 | 4 | 75,518 | 56,697 |
| Finished Leaded Motor Gasoline | 0 | 2,551 | 194 | -1,486 | 0 | 6,683 | 0 | 0 | 1 | 7,941 | 11,890 |
| Finished Unleaded Motor Gasoline | 0 | 20,276 | 11,898 | -137 | 0 | 35,543 | 0 | 0 | 3 | 67,577 | 44,807 |
| Finished Aviation Gasoline | 0 | 11 | 0 | 51 | 0 | 91 | 0 | 0 | 0 | 153 | 282 |
| Naphtha-Type Jet Fuel | 0 | 881 | 0 | 141 | 0 | 468 | 0 | 0 | 0 | 1,490 | 1,485 |
| Kerosene-Type Jet Fuel | 0 | 2,646 | 1,553 | -346 | 0 | 9,490 | 0 | 0 | 21 | 13,322 | 10,433 |
| Kerosene | 0 | 8 | 13 | -50 | 0 | 261 | 0 | 0 | 4 | 228 | 2,340 |
| Distillate Fuel Oil | 0 | 10,116 | 5,782 | -6,711 | 0 | 14,275 | 0 | 0 | 8 | 23,454 | 44,558 |
| Residual Fuel Oil | 0 | 4,318 | 12,685 | -177 | 0 | 486 | 0 | 0 | 3 | 17,309 | 16,539 |
| Petrochemical Feedstocks[2] | 0 | 380 | 166 | -130 | 0 | -18 | 0 | 0 | 64 | 334 | 572 |
| Special Naphthas | 0 | 91 | 73 | 14 | 0 | 205 | 0 | 0 | 83 | 300 | 1,056 |
| Lubricants | 0 | 816 | 259 | 0 | 0 | 973 | 0 | 0 | 178 | 1,870 | 2,950 |
| Waxes | 0 | 97 | 33 | -22 | 0 | 5 | 0 | 0 | 6 | 107 | 88 |
| Petroleum Coke | 0 | 1,327 | 17 | 46 | 0 | 0 | 0 | 0 | 521 | 869 | 532 |
| Asphalt and Road Oil | 0 | 4,035 | 909 | 300 | 0 | 385 | 0 | 0 | (s) | 5,629 | 5,778 |
| Still Gas | 0 | 2,162 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,162 | 0 |
| Miscellaneous Products | 0 | 413 | 61 | 70 | 0 | 66 | 0 | 0 | 45 | 565 | 927 |
| **Total** | **2,027** | **51,985** | **76,194** | **-8,402** | **2,778** | **73,304** | **0** | **49,697** | **972** | **147,217** | **182,970** |

[1] Unaccounted for crude oil is a balancing item.

[2] Includes naphtha less than 400 degrees F endpoint and other oils equal to or greater than 400 degrees F endpoint.

(s) = Less than 500 barrels.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 7. PAD District II Supply and Disposition of Crude Oil and Petroleum Products,
(Thousand Barrels)

| Commodity | Supply | | | | | | Disposition | | | | Ending Stocks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Field Production | Refinery Production | Imports by PADD of Entry | Stock Withdrawal (+) or Addition (-) | Unaccounted For Crude Oil[1] | Net Receipts | Crude Losses | Refinery Inputs | Exports | Products Supplied | |
| **Crude Oil (including lease condensate)** | E **24,964** | **0** | **16,665** | **3,805** | **-610** | **48,787** | **0** | **93,563** | **48** | **0** | **78,485** |
| **Natural Gas Liquids and LRGs** | **9,503** | **2,761** | **1,939** | **-4,953** | **0** | **1,485** | **0** | **3,195** | **505** | **7,035** | **36,476** |
| Liquefied Petroleum Gases | 7,977 | 2,761 | 1,904 | -4,412 | 0 | 627 | 0 | 2,037 | 442 | 6,377 | 33,001 |
| Pentanes Plus | 1,526 | 0 | 35 | -541 | 0 | 858 | 0 | 1,158 | 63 | 657 | 3,475 |
| **Other Liquids** | **391** | **0** | **0** | **-260** | **0** | **-166** | **0** | **1,459** | **0** | **-1,494** | **23,549** |
| Other Hydrocarbons and Alcohol | 391 | 0 | 0 | 17 | 0 | 0 | 0 | 408 | 0 | 0 | 170 |
| Unfinished Oils | 0 | 0 | 0 | -259 | 0 | 0 | 0 | 177 | 0 | -436 | 16,346 |
| Motor Gasoline Blending Components | 0 | 0 | 0 | 118 | 0 | -166 | 0 | 881 | 0 | -929 | 6,798 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | -136 | 0 | 0 | 0 | -7 | 0 | -129 | 235 |
| **Finished Petroleum Products** | **3** | **99,318** | **900** | **-2,247** | **0** | **23,622** | **0** | **0** | **474** | **121,122** | **111,187** |
| Finished Motor Gasoline | 0 | 53,268 | 117 | -816 | 0 | 15,702 | 0 | 0 | 84 | 68,187 | 48,803 |
| Finished Leaded Motor Gasoline | 0 | 10,085 | 13 | -481 | 0 | 2,828 | 0 | 0 | 1 | 12,444 | 14,269 |
| Finished Unleaded Motor Gasoline | 0 | 43,183 | 104 | -335 | 0 | 12,874 | 0 | 0 | 83 | 55,743 | 34,534 |
| Finished Aviation Gasoline | 0 | 144 | 0 | 49 | 0 | 95 | 0 | 0 | 0 | 288 | 506 |
| Naphtha-Type Jet Fuel | 0 | 643 | 91 | 5 | 0 | -57 | 0 | 0 | 0 | 682 | 962 |
| Kerosene-Type Jet Fuel | 0 | 5,487 | 363 | -394 | 0 | 2,340 | 0 | 0 | 1 | 7,795 | 8,186 |
| Kerosene | 0 | 232 | 0 | -52 | 0 | -149 | 0 | 0 | 1 | 30 | 1,684 |
| Distillate Fuel Oil | 0 | 19,783 | 158 | -896 | 0 | 5,300 | 0 | 0 | 2 | 24,343 | 30,543 |
| Residual Fuel Oil | 0 | 1,933 | 64 | -447 | 0 | -61 | 0 | 0 | 0 | 1,489 | 3,815 |
| Petrochemical Feedstocks[2] | 0 | 1,657 | 14 | -38 | 0 | 42 | 0 | 0 | 56 | 1,619 | 422 |
| Special Naphthas | 0 | 482 | 30 | -214 | 0 | 90 | 0 | 0 | 2 | 386 | 801 |
| Lubricants | 0 | 809 | 13 | -101 | 0 | 225 | 0 | 0 | 36 | 910 | 2,316 |
| Waxes | 0 | 69 | 11 | -25 | 0 | 0 | 0 | 0 | 60 | -5 | 115 |
| Petroleum Coke | 0 | 3,529 | 0 | -139 | 0 | 0 | 0 | 0 | 230 | 3,160 | 2,564 |
| Asphalt and Road Oil | 0 | 6,245 | 37 | 909 | 0 | 93 | 0 | 0 | 2 | 7,282 | 10,086 |
| Still Gas | 0 | 4,720 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,720 | 0 |
| Miscellaneous Products | 3 | 317 | 2 | -88 | 0 | 2 | 0 | 0 | 2 | 234 | 384 |
| **Total** | **34,861** | **102,079** | **19,504** | **-3,655** | **-610** | **73,728** | **0** | **98,217** | **1,028** | **126,662** | **249,697** |

[1] Unaccounted for crude oil is a balancing item.

[2] Includes naphtha less than 400 degrees F endpoint and other oils equal to or greater than 400 degrees F endpoint.

(s) = Less than 500 barrels.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 8. PAD District III--Supply and Disposition of Crude Oil and Petroleum Products, July 1988

(Thousand Barrels)

| Commodity | Supply | | | | | | Disposition | | | | Ending Stocks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Field Production | Refinery Production | Imports by PADD of Entry | Stock Withdrawal (+) or Addition (-) | Unaccounted For Crude Oil[1] | Net Receipts | Crude Losses | Refinery Inputs | Exports | Products Supplied | |
| **Crude Oil (including lease condensate)** | **E 112,242** | **0** | **98,345** | **-1,110** | **7,376** | **-28,204** | **15** | **188,634** | **0** | **0** | **720,381** |
| **Natural Gas Liquids and LRGs** | **33,073** | **9,263** | **3,926** | **-5,902** | **0** | **-1,449** | **0** | **7,368** | **396** | **31,147** | **76,273** |
| Liquefied Petroleum Gases | 27,247 | 9,263 | 3,924 | -6,072 | 0 | -795 | 0 | 3,852 | 396 | 29,319 | 70,238 |
| Pentanes Plus | 5,826 | 0 | 2 | 170 | 0 | -654 | 0 | 3,516 | 0 | 1,828 | 6,035 |
| **Other Liquids** | **935** | **0** | **8,311** | **2,157** | **0** | **-399** | **0** | **12,630** | **0** | **-1,626** | **67,401** |
| Other Hydrocarbons and Alcohol | 935 | 0 | 0 | 40 | 0 | 0 | 0 | 975 | 0 | 0 | 138 |
| Unfinished Oils | 0 | 0 | 8,028 | 1,593 | 0 | -333 | 0 | 11,388 | 0 | -2,100 | 52,782 |
| Motor Gasoline Blending Components | 0 | 0 | 283 | 516 | 0 | -66 | 0 | 259 | 0 | 474 | 14,433 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 8 | 0 | 0 | 48 |
| **Finished Petroleum Products** | **94** | **208,065** | **3,056** | **-2,778** | **0** | **-95,569** | **0** | **0** | **8,503** | **104,366** | **129,931** |
| Finished Motor Gasoline | 10 | 100,564 | 988 | -2,057 | 0 | -59,586 | 0 | 0 | 272 | 39,647 | 48,437 |
| Finished Leaded Motor Gasoline | 9 | 18,549 | 0 | -109 | 0 | -9,823 | 0 | 0 | 196 | 8,430 | 10,867 |
| Finished Unleaded Motor Gasoline | 1 | 82,015 | 988 | -1,948 | 0 | -49,763 | 0 | 0 | 76 | 31,217 | 37,570 |
| Finished Aviation Gasoline | 0 | 646 | 0 | -104 | 0 | -273 | 0 | 0 | 0 | 269 | 549 |
| Naphtha-Type Jet Fuel | 0 | 2,961 | 0 | -252 | 0 | -626 | 0 | 0 | 0 | 2,083 | 2,335 |
| Kerosene-Type Jet Fuel | 0 | 16,950 | 90 | -412 | 0 | -12,468 | 0 | 0 | 20 | 4,140 | 13,398 |
| Kerosene | 0 | 1,606 | 0 | -152 | 0 | -112 | 0 | 0 | 1 | 1,341 | 1,897 |
| Distillate Fuel Oil | 42 | 39,361 | 299 | -1,612 | 0 | -19,955 | 0 | 0 | 724 | 17,411 | 28,882 |
| Residual Fuel Oil | 0 | 10,932 | 524 | 1,882 | 0 | -425 | 0 | 0 | 2,483 | 10,430 | 12,284 |
| Petrochemical Feedstocks[2] | 0 | 8,467 | 973 | 49 | 0 | -24 | 0 | 0 | 257 | 9,208 | 3,198 |
| Special Naphthas | 0 | 1,071 | 97 | 237 | 0 | -295 | 0 | 0 | 122 | 988 | 1,618 |
| Lubricants | 0 | 3,018 | 40 | -96 | 0 | -1,254 | 0 | 0 | 363 | 1,345 | 6,774 |
| Waxes | 0 | 262 | 3 | 0 | 0 | -5 | 0 | 0 | 16 | 244 | 458 |
| Petroleum Coke | 0 | 7,111 | 0 | -116 | 0 | 0 | 0 | 0 | 4,241 | 2,754 | 3,441 |
| Asphalt and Road Oil | 0 | 4,498 | 17 | -131 | 0 | -478 | 0 | 0 | 1 | 3,905 | 4,744 |
| Still Gas | 0 | 9,575 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9,575 | 0 |
| Miscellaneous Products | 42 | 1,043 | 25 | -14 | 0 | -68 | 0 | 0 | 2 | 1,026 | 1,916 |
| **Total** | **146,344** | **217,328** | **113,639** | **-7,633** | **7,376** | **-125,621** | **15** | **208,632** | **8,899** | **133,887** | **993,986** |

[1] Unaccounted for crude oil is a balancing item.

[2] Includes naphtha less than 400 degrees F endpoint and other oils equal to or greater than 400 degrees F endpoint.

(s) = Less than 500 barrels.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 9. PAD District IV--Supply and Disposition of Crude Oil and Petroleum Products, July 1988

(Thousand Barrels)

| Commodity | Supply | | | | | | Disposition | | | | Ending Stocks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Field Production | Refinery Production | Imports by PADD of Entry | Stock Withdrawal (+) or Addition (-) | Unaccounted For Crude Oil[1] | Net Receipts | Crude Losses | Refinery Inputs | Exports | Products Supplied | |
| **Crude Oil (including lease condensate)** | E **17,320** | **0** | **2,108** | **356** | **1,149** | **-5,804** | **0** | **15,129** | **0** | **0** | **12,948** |
| **Natural Gas Liquids and LRGs** | **3,708** | **416** | **240** | **-95** | **0** | **-1,968** | **0** | **493** | **21** | **1,787** | **1,147** |
| Liquefied Petroleum Gases | 2,958 | 416 | 240 | -94 | 0 | -1,764 | 0 | 430 | 21 | 1,305 | 1,003 |
| Pentanes Plus | 750 | 0 | 0 | -1 | 0 | -204 | 0 | 63 | 0 | 482 | 144 |
| **Other Liquids** | **16** | **0** | **0** | **53** | **0** | **0** | **0** | **-8** | **0** | **77** | **3,767** |
| Other Hydrocarbons and Alcohol | 16 | 0 | 0 | -9 | 0 | 0 | 0 | 7 | 0 | 0 | 18 |
| Unfinished Oils | 0 | 0 | 0 | 79 | 0 | 0 | 0 | -86 | 0 | 165 | 2,113 |
| Motor Gasoline Blending Components | 0 | 0 | 0 | -17 | 0 | 0 | 0 | 71 | 0 | -88 | 1,636 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Finished Petroleum Products** | **5** | **15,543** | **139** | **758** | **0** | **-470** | **0** | **0** | **4** | **15,971** | **12,006** |
| Finished Motor Gasoline | 0 | 7,769 | 75 | 561 | 0 | -377 | 0 | 0 | 0 | 8,028 | 4,036 |
| Finished Leaded Motor Gasoline | 0 | 2,914 | 6 | 228 | 0 | -381 | 0 | 0 | 0 | 2,767 | 1,716 |
| Finished Unleaded Motor Gasoline | 0 | 4,855 | 69 | 333 | 0 | 4 | 0 | 0 | 0 | 5,261 | 2,320 |
| Finished Aviation Gasoline | 0 | 29 | 0 | 14 | 0 | 18 | 0 | 0 | 0 | 61 | 48 |
| Naphtha-Type Jet Fuel | 0 | 447 | 0 | -34 | 0 | -127 | 0 | 0 | 0 | 286 | 360 |
| Kerosene-Type Jet Fuel | 0 | 865 | 0 | -52 | 0 | 388 | 0 | 0 | (s) | 1,201 | 789 |
| Kerosene | 0 | -27 | 0 | 28 | 0 | 0 | 0 | 0 | 0 | 1 | 47 |
| Distillate Fuel Oil | 0 | 3,716 | 58 | 45 | 0 | -372 | 0 | 0 | 0 | 3,447 | 3,162 |
| Residual Fuel Oil | 0 | 284 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 291 | 482 |
| Petrochemical Feedstocks[2] | 0 | 22 | 0 | -7 | 0 | 0 | 0 | 0 | 2 | 13 | 26 |
| Special Naphthas | 0 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | -1 | 6 |
| Lubricants | 0 | 36 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 36 | 100 |
| Waxes | 0 | 89 | 0 | -54 | 0 | 0 | 0 | 0 | (s) | 35 | 127 |
| Petroleum Coke | 0 | 360 | 0 | -4 | 0 | 0 | 0 | 0 | (s) | 356 | 17 |
| Asphalt and Road Oil | 0 | 1,238 | 6 | 266 | 0 | 0 | 0 | 0 | 1 | 1,509 | 2,745 |
| Still Gas | 0 | 644 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 644 | 0 |
| Miscellaneous Products | 5 | 71 | 0 | -12 | 0 | 0 | 0 | 0 | (s) | 64 | 61 |
| **Total** | **21,049** | **15,959** | **2,487** | **1,072** | **1,149** | **-8,242** | **0** | **15,614** | **25** | **17,835** | **29,868** |

[1] Unaccounted for crude oil is a balancing item.

[2] Includes naphtha less than 400 degrees F endpoint and other oils equal to or greater than 400 degrees F endpoint.

(s) = Less than 500 barrels.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 10. PAD District V--Supply and Disposition of Crude Oil and Petroleum Products, July 1988

(Thousand Barrels)

| Commodity | Supply |  |  |  |  |  | Disposition |  |  |  | Ending Stocks |
|---|---|---|---|---|---|---|---|---|---|---|---|
|  | Field Production | Refinery Production | Imports by PADD of Entry | Stock Withdrawal (+) or Addition (-) | Unaccounted For Crude Oil[1] | Net Receipts | Crude Losses | Refinery Inputs | Exports | Products Supplied |  |
| **Crude Oil (including lease condensate)** | **E 94,147** | **0** | **2,921** | **2,921** | **6,283** | **-16,829** | **0** | **82,694** | **5,859** | **890** | **73,724** |
| **Natural Gas Liquids and LRGs** | **2,664** | **2,278** | **105** | **-564** | **0** | **0** | **0** | **828** | **203** | **3,452** | **2,922** |
| Liquefied Petroleum Gases | 1,277 | 2,278 | 105 | -564 | 0 | 0 | 0 | 657 | 203 | 2,236 | 2,863 |
| Pentanes Plus | 1,387 | 0 | 0 | 0 | 0 | 0 | 0 | 171 | 0 | 1,216 | 59 |
| **Other Liquids** | **481** | **0** | **0** | **304** | **0** | **156** | **0** | **493** | **0** | **448** | **36,620** |
| Other Hydrocarbons and Alcohol | 481 | 0 | 0 | 9 | 0 | 0 | 0 | 490 | 0 | 0 | 7 |
| Unfinished Oils | 0 | 0 | 0 | 733 | 0 | 156 | 0 | 371 | 0 | 518 | 28,716 |
| Motor Gasoline Blending Components | 0 | 0 | 0 | -415 | 0 | 0 | 0 | -345 | 0 | -70 | 7,848 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | -23 | 0 | 0 | 0 | -23 | 0 | 0 | 49 |
| **Finished Petroleum Products** | **0** | **86,178** | **1,978** | **-101** | **0** | **3,504** | **0** | **0** | **8,760** | **82,799** | **56,898** |
| Finished Motor Gasoline | 0 | 37,497 | 1,018 | -250 | 0 | 2,035 | 0 | 0 | 6 | 40,294 | 19,975 |
| Finished Leaded Motor Gasoline | 0 | 9,121 | 37 | 335 | 0 | 693 | 0 | 0 | 1 | 10,185 | 5,712 |
| Finished Unleaded Motor Gasoline | 0 | 28,376 | 981 | -585 | 0 | 1,342 | 0 | 0 | 4 | 30,110 | 14,263 |
| Finished Aviation Gasoline | 0 | 171 | 6 | 12 | 0 | 69 | 0 | 0 | 0 | 258 | 398 |
| Naphtha-Type Jet Fuel | 0 | 1,535 | 7 | 180 | 0 | 342 | 0 | 0 | 0 | 2,064 | 1,568 |
| Kerosene-Type Jet Fuel | 0 | 9,845 | 420 | -103 | 0 | 250 | 0 | 0 | 65 | 10,346 | 7,491 |
| Kerosene | 0 | 165 | 0 | -11 | 0 | 0 | 0 | 0 | (s) | 154 | 232 |
| Distillate Fuel Oil | 0 | 13,241 | 72 | 402 | 0 | 752 | 0 | 0 | 1,062 | 13,405 | 12,289 |
| Residual Fuel Oil | 0 | 10,840 | 258 | -214 | 0 | 0 | 0 | 0 | 3,903 | 6,981 | 7,952 |
| Petrochemical Feedstocks[2] | 0 | 372 | 73 | -123 | 0 | 0 | 0 | 0 | 147 | 175 | 323 |
| Special Naphthas | 0 | 92 | 9 | 18 | 0 | 0 | 0 | 0 | 76 | 43 | 159 |
| Lubricants | 0 | 548 | 0 | 70 | 0 | 56 | 0 | 0 | 175 | 499 | 1,883 |
| Waxes | 0 | 79 | 3 | -2 | 0 | 0 | 0 | 0 | 8 | 72 | 114 |
| Petroleum Coke | 0 | 4,305 | 26 | -78 | 0 | 0 | 0 | 0 | 3,273 | 980 | 1,916 |
| Asphalt and Road Oil | 0 | 2,595 | 86 | 40 | 0 | 0 | 0 | 0 | 39 | 2,682 | 2,237 |
| Still Gas | 0 | 4,698 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,698 | 0 |
| Miscellaneous Products | 0 | 195 | 0 | -42 | 0 | 0 | 0 | 0 | 5 | 148 | 361 |
| **Total** | **97,292** | **88,456** | **5,004** | **2,560** | **6,283** | **-13,169** | **0** | **84,015** | **14,822** | **87,589** | **170,164** |

[1] Unaccounted for crude oil is a balancing item.

[2] Includes naphtha less than 400 degrees F endpoint and other oils equal to or greater than 400 degrees F endpoint.

(s) = Less than 500 barrels.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 11. Production of Crude Oil by PAD District and State
(Thousand Barrels)

| PAD District and State | May 1988 | | January - May | |
|---|---|---|---|---|
| | Total | Daily Average | Total | Daily Average |
| **PAD District I, Total** | **1,163** | E **38** | E **5,953** | E **39** |
| Florida | 672 | 22 | 3,362 | 22 |
| New York | E 55 | E 2 | E 247 | E 2 |
| Pennsylvania | E 255 | E 8 | E 1,201 | E 8 |
| Virginia | E 1 | E 0 | E 10 | E 0 |
| West Virginia | 222 | 7 | 1,130 | 7 |
| Adjustment [1] | –42 | –1 | 3 | (s) |
| **PAD District II, Total** | E **26,062** | E **841** | E **129,139** | E **850** |
| Illinois | 1,980 | 64 | 10,005 | 66 |
| Indiana | 360 | 12 | 1,659 | 11 |
| Kansas | 4,897 | 158 | 24,534 | 161 |
| Kentucky | 473 | 15 | 2,243 | 15 |
| Michigan | E 1,989 | E 64 | E 10,131 | E 67 |
| Missouri | 13 | (s) | E 55 | E 0 |
| Nebraska | 498 | 16 | 2,385 | 16 |
| North Dakota | 3,413 | 110 | 16,599 | 109 |
| Ohio | E 891 | E 29 | E 4,523 | E 30 |
| Oklahoma | 11,222 | 362 | 55,068 | 362 |
| South Dakota | 141 | 5 | 708 | 5 |
| Tennessee | 51 | 2 | E 253 | E 2 |
| Adjustment [1] | 134 | 4 | 976 | 6 |
| **PAD District III, Total** | E **113,348** | E **3,656** | E **563,188** | E **3,705** |
| Alabama | 1,625 | 52 | 8,573 | 56 |
| Arkansas | E 1,172 | E 38 | E 5,783 | E 38 |
| Louisiana [2] | 14,283 | 461 | 70,496 | 464 |
| Mississippi | 2,292 | 74 | 11,401 | 75 |
| New Mexico | 5,905 | 190 | 29,586 | 195 |
| Texas [2] | 62,600 | 2,019 | 310,945 | 2,046 |
| Federal Offshore PAD District III | 25,634 | 827 | E 125,348 | E 825 |
| Adjustment [1] | –163 | –5 | 1,056 | 7 |
| **PAD District IV, Total** | E **17,475** | E **564** | E **85,837** | E **565** |
| Colorado | E 2,821 | E 91 | E 13,253 | E 87 |
| Montana | 2,020 | 65 | 9,891 | 65 |
| Utah | 2,963 | 96 | 14,325 | 94 |
| Wyoming | 9,824 | 317 | 48,583 | 320 |
| Adjustment [1] | –153 | –5 | –215 | –1 |
| **PAD District V, Total** | **96,243** | **3,105** | **475,448** | **3,128** |
| Alaska [2] | 62,493 | 2,016 | 310,028 | 2,040 |
| South Alaska | 1,344 | 43 | 6,552 | 43 |
| North Slope | 61,149 | 1,973 | 303,479 | 1,997 |
| Adjustment for Alaska [1] | 0 | 0 | –3 | (s) |
| Arizona | 10 | (s) | 48 | (s) |
| California [2] | 30,380 | 980 | 149,511 | 984 |
| Nevada | 272 | 9 | 1,296 | 9 |
| Federal Offshore PAD District V | 2,753 | 89 | 13,012 | 86 |
| Adjustment for Arizona, California, and Nevada [1] | 335 | 11 | 1,553 | 10 |
| **U.S. Total**[2] | E **254,291** | E **8,203** | E **1,259,564** | E **8,287** |

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[1] These adjustments are used to reconcile the national and PAD District level sums of the State data with the independently estimated U.S. and Alaskan figures shown in the Summary Statistics portion of this issue and with the PAD District level figures published in a previous issue. Final data at the State, PAD District, and national levels will be published without adjustments in the *Petroleum Supply Annual*.

[2] Includes the following current month offshore production (thousand barrels): Alaska: State - 4,205; California: State - 2,445; Louisiana: State - 2,259; Texas: State - 151; U.S. Total, including Federal offshore - E37,447.

(s) = Less than 500 barrels or less than 500 barrels per day.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Source: State Conservation Agencies and the U.S. Minerals Management Service.

## Table 12. Natural Gas Processing Plant Net Production of Petroleum Products by PAD District, July 1988
(Thousand Barrels)

| Commodity | PAD District I | | | PAD District II | | | | PAD District III | | | | | | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | East Coast | Appalachian No.1 | Total | Ind., Ill., Ky. * | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast | |
| **Natural Gas Liquids** | **254** | **589** | **843** | **765** | **456** | **8,282** | **9,503** | **19,051** | **3,091** | **6,564** | **640** | **3,727** | **33,073** | **3,708** | **2,664** | **49,791** |
| Pentanes Plus | 57 | 74 | 131 | 143 | 129 | 1,254 | 1,526 | 3,708 | 207 | 1,224 | 181 | 506 | 5,826 | 750 | 1,387 | 9,620 |
| Liquefied Petroleum Gases | 197 | 515 | 712 | 622 | 327 | 7,028 | 7,977 | 15,343 | 2,884 | 5,340 | 459 | 3,221 | 27,247 | 2,958 | 1,277 | 40,171 |
| Ethane | 63 | 175 | 238 | 132 | 1 | 2,710 | 2,843 | 6,329 | 1,031 | 2,243 | 108 | 1,550 | 11,261 | 929 | 2 | 15,273 |
| Propane | 80 | 224 | 304 | 286 | 191 | 2,850 | 3,327 | 5,677 | 1,238 | 1,849 | 183 | 1,082 | 10,029 | 1,260 | 341 | 15,261 |
| Normal Butane | 45 | 87 | 132 | 107 | 127 | 942 | 1,176 | 2,424 | –955 | 558 | 118 | 397 | 2,542 | 526 | 693 | 5,069 |
| Isobutane | 9 | 29 | 38 | 97 | 8 | 526 | 631 | 913 | 1,570 | 690 | 50 | 192 | 3,415 | 243 | 241 | 4,568 |
| **Finished Petroleum Products** | **0** | **0** | **0** | **1** | **0** | **2** | **3** | **30** | **50** | **1** | **13** | **0** | **94** | **5** | **0** | **102** |
| Finished Motor Gasoline | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 9 | 0 | 0 | 0 | 10 | 0 | 0 | 10 |
| Finished Leaded Motor Gasoline | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 9 | 0 | 0 | 9 |
| Finished Unleaded Motor Gasoline | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| Finished Aviation Gasoline | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Naphtha-Type Jet Fuel | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Kerosene-Type Jet Fuel | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Kerosene | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Distillate Fuel Oil | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 41 | 1 | 0 | 0 | 42 | 0 | 0 | 42 |
| Special Naphthas | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Miscellaneous Products | 0 | 0 | 0 | 1 | 0 | 2 | 3 | 29 | 0 | 0 | 13 | 0 | 42 | 5 | 0 | 50 |
| **Total Production** | **254** | **589** | **843** | **766** | **456** | **8,284** | **9,506** | **19,081** | **3,141** | **6,565** | **653** | **3,727** | **33,167** | **3,713** | **2,664** | **49,893** |

* Effective January 1987 "Appalachian No.2" is combined with "Ind., Ill., Ky.".

Sources and estimation procedures: See Explanatory Notes 1 and 2.

(Thousand Barrels, Except Where Noted)

| Commodity | PAD District I | | | PAD District II | | | | PAD District III | | | | | | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | East Coast | Appalachian No.1 | Total | Ind., Ill., Ky. * | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast | |
| **Crude Oil (including lease condensate)** | **40,296** | **3,252** | **43,548** | **61,663** | **10,269** | **21,631** | **93,563** | **15,536** | **97,403** | **67,695** | **5,715** | **2,285** | **188,634** | **15,129** | **82,694** | **423,568** |
| **Natural Gas Liquids** | | | | | | | | | | | | | | | | |
| Pentanes Plus | 29 | 0 | 29 | 420 | 55 | 683 | 1,158 | 906 | 2,088 | 208 | 188 | 126 | 3,516 | 63 | 171 | 4,937 |
| Liquefied Petroleum Gases | 52 | 29 | 81 | 1,383 | 95 | 559 | 2,037 | 509 | 1,354 | 1,847 | 99 | 43 | 3,852 | 430 | 657 | 7,057 |
| Ethane | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 55 | 0 | 0 | 55 | 0 | 0 | 55 |
| Propane | 1 | 0 | 1 | 88 | 0 | 0 | 88 | 0 | 129 | 41 | 0 | 0 | 170 | 0 | 2 | 261 |
| Normal Butane | 0 | 29 | 29 | 374 | 17 | 56 | 447 | 120 | 293 | 547 | 2 | 4 | 966 | 305 | 309 | 2,056 |
| Isobutane | 51 | 0 | 51 | 921 | 78 | 503 | 1,502 | 389 | 932 | 1,204 | 97 | 39 | 2,661 | 125 | 346 | 4,685 |
| **Other Liquids** | | | | | | | | | | | | | | | | |
| Other Hydrocarbons and Alcohol | 36 | 0 | 36 | 407 | 1 | 0 | 408 | 0 | 568 | 392 | 0 | 15 | 975 | 7 | 490 | 1,916 |
| Unfinished Oil (net) | 4,604 | 157 | 4,761 | 169 | -64 | 72 | 177 | 381 | 7,589 | 3,332 | 90 | -4 | 11,388 | -86 | 371 | 16,611 |
| Motor Gasoline Blending Components (net) | 1,245 | -3 | 1,242 | 722 | 31 | 128 | 881 | -121 | -1,210 | 1,547 | 49 | -6 | 259 | 71 | -345 | 2,108 |
| Aviation Gasoline Blending Components (net) | 0 | 0 | 0 | -11 | 0 | 4 | -7 | 0 | 0 | 8 | 0 | 0 | 8 | 0 | -23 | -22 |
| **Total Input to Refineries** | **46,262** | **3,435** | **49,697** | **64,753** | **10,387** | **23,077** | **98,217** | **17,211** | **107,792** | **75,029** | **6,141** | **2,459** | **208,632** | **15,614** | **84,015** | **456,175** |
| **Crude Oil Distillation** | | | | | | | | | | | | | | | | |
| Gross Input (daily average) | 1,303 | 105 | 1,408 | 1,996 | 331 | 700 | 3,027 | 506 | 3,152 | 2,238 | 181 | 73 | 6,149 | 493 | 2,726 | 13,803 |
| Operable Capacity (daily average) | 1,352 | 109 | 1,462 | 2,253 | 332 | 734 | 3,320 | 587 | 3,603 | 2,947 | 255 | 76 | 7,467 | 534 | 3,170 | 15,952 |
| Operating Ratio (percent)[1] | 96.3 | 96.1 | 96.3 | 88.6 | 99.7 | 95.4 | 91.2 | 86.3 | 87.5 | 75.9 | 71.1 | 96.2 | 82.4 | 92.4 | 86.0 | 86.5 |
| **Downstream Processing** | | | | | | | | | | | | | | | | |
| **Fresh Feed Input (daily average)** | | | | | | | | | | | | | | | | |
| Catalytic Cracking | 556 | 17 | 573 | 693 | 105 | 235 | 1,032 | 192 | 1,271 | 737 | 31 | 26 | 2,256 | 167 | 672 | 4,702 |
| Catalytic Hydrocracking | 56 | 0 | 56 | 130 | 0 | 6 | 136 | 15 | 182 | 155 | 0 | 0 | 352 | 6 | 448 | 999 |
| Cokers | 70 | 0 | 70 | 140 | 59 | 74 | 273 | 10 | 203 | 271 | 13 | 0 | 497 | 17 | 480 | 1,336 |
| **Crude Oil Qualities** | | | | | | | | | | | | | | | | |
| Sulfur Content, Weighted Average (percent) | 1.05 | .68 | 1.02 | 1.08 | 2.17 | .56 | 1.08 | .87 | .80 | 1.19 | 1.35 | .80 | .96 | .84 | 1.21 | 1.04 |
| API Gravity, Weighted Average | 30.10 | 37.60 | 30.66 | 34.09 | 28.95 | 36.78 | 34.15 | 37.89 | 33.92 | 30.95 | 34.01 | 40.67 | 33.29 | 35.61 | 25.29 | 31.73 |
| **Operable Capacity (daily average)** | **1,352** | **109** | **1,462** | **2,253** | **332** | **734** | **3,320** | **587** | **3,603** | **2,947** | **255** | **76** | **7,467** | **534** | **3,170** | **15,952** |
| Operating | 1,298 | 109 | 1,407 | 2,187 | 332 | 734 | 3,253 | 528 | 3,412 | 2,373 | 238 | 76 | 6,626 | 534 | 3,040 | 14,860 |
| Idle | 55 | 0 | 55 | 67 | 0 | 0 | 67 | 59 | 191 | 574 | 17 | 0 | 841 | 0 | 130 | 1,092 |
| **Alaskan Crude Oil Receipts** | **1,063** | **0** | **1,063** | **1,762** | **0** | **185** | **1,947** | **0** | **4,395** | **3,406** | **187** | **0** | **7,988** | **0** | **41,750** | **52,748** |

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[1] Represents gross input divided by operable capacity.

(s) = Less than 500 barrels.

* Effective January 1987 "Appalachian No.2" is combined with "Ind., Ill., Ky.".

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 14. Refinery Net Production of Petroleum Products by PAD District, July 1988

(Thousand Barrels)

| Commodity | PAD District I | | | PAD District II | | | | PAD District III | | | | | | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | East Coast | Appalachian No.1 | Total | Ind., Ill., Ky. * | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast | |
| Liquefied Refinery Gases | 1,831 | 26 | 1,857 | 1,990 | 264 | 507 | 2,761 | 219 | 4,674 | 4,160 | 109 | 101 | 9,263 | 416 | 2,278 | 16,575 |
| Ethane | 149 | 0 | 149 | 17 | 0 | 0 | 17 | -51 | 259 | 5 | 0 | 0 | 213 | 0 | 43 | 422 |
| Propane | 1,337 | 26 | 1,363 | 1,920 | 240 | 486 | 2,646 | 399 | 3,386 | 1,911 | 82 | 60 | 5,838 | 223 | 1,173 | 11,243 |
| Normal Butane | 285 | 0 | 285 | 21 | 18 | 14 | 53 | -294 | 1,022 | 2,222 | 27 | 31 | 3,008 | 163 | 821 | 4,330 |
| Isobutane | 60 | 0 | 60 | 32 | 6 | 7 | 45 | 165 | 7 | 22 | 0 | 10 | 204 | 30 | 241 | 580 |
| Finished Motor Gasoline | 21,574 | 1,253 | 22,827 | 35,784 | 5,195 | 12,289 | 53,268 | 9,327 | 51,382 | 36,717 | 1,810 | 1,328 | 100,564 | 7,769 | 37,497 | 221,925 |
| Finished Leaded Motor Gasoline | 2,332 | 219 | 2,551 | 4,887 | 1,075 | 4,123 | 10,085 | 2,653 | 8,131 | 6,916 | 408 | 441 | 18,549 | 2,914 | 9,121 | 43,220 |
| Finished Unleaded Motor Gasoline | 19,242 | 1,034 | 20,276 | 30,897 | 4,120 | 8,166 | 43,183 | 6,674 | 43,251 | 29,801 | 1,402 | 887 | 82,015 | 4,855 | 28,376 | 178,705 |
| Finished Aviation Gasoline | 11 | 0 | 11 | 89 | 25 | 30 | 144 | 130 | 302 | 214 | 0 | 0 | 646 | 29 | 171 | 1,001 |
| Naphtha-Type Jet Fuel | 881 | 0 | 881 | 374 | 37 | 232 | 643 | 697 | 1,138 | 612 | 214 | 300 | 2,961 | 447 | 1,535 | 6,467 |
| Kerosene-Type Jet Fuel | 2,646 | 0 | 2,646 | 3,689 | 511 | 1,287 | 5,487 | 1,007 | 8,321 | 7,400 | 180 | 42 | 16,950 | 865 | 9,845 | 35,793 |
| Kerosene | -44 | 52 | 8 | 176 | 2 | 54 | 232 | 3 | 1,094 | 469 | 40 | 0 | 1,606 | -27 | 165 | 1,984 |
| Distillate Fuel Oil | 9,051 | 1,065 | 10,116 | 11,474 | 2,653 | 5,656 | 19,783 | 3,867 | 19,572 | 13,841 | 1,589 | 492 | 39,361 | 3,716 | 13,241 | 86,217 |
| Residual Fuel Oil | 4,265 | 53 | 4,318 | 1,573 | 241 | 119 | 1,933 | 441 | 5,255 | 4,914 | 305 | 17 | 10,932 | 284 | 10,840 | 28,307 |
| Naphtha < 400 Deg. for Petro. Feed. Use | 372 | 0 | 372 | 625 | 0 | 110 | 735 | 170 | 1,960 | 56 | 36 | -2 | 2,220 | 7 | 59 | 3,393 |
| Other Oils > 400 Deg. for Petro. Feed. Use | 8 | 0 | 8 | 856 | 0 | 66 | 922 | 134 | 4,738 | 1,375 | 0 | 0 | 6,247 | 15 | 313 | 7,505 |
| Special Naphthas | 71 | 20 | 91 | 397 | 0 | 85 | 482 | 67 | 784 | 60 | 160 | 0 | 1,071 | 0 | 92 | 1,736 |
| Lubricants | 430 | 386 | 816 | 471 | 0 | 338 | 809 | 28 | 1,987 | 563 | 440 | 0 | 3,018 | 36 | 548 | 5,227 |
| Waxes | 0 | 97 | 97 | 33 | 0 | 36 | 69 | 11 | 145 | 50 | 56 | 0 | 262 | 89 | 79 | 596 |
| Petroleum Coke | 1,301 | 26 | 1,327 | 2,178 | 596 | 755 | 3,529 | 376 | 3,507 | 3,054 | 134 | 40 | 7,111 | 360 | 4,305 | 16,632 |
| Marketable | 345 | 0 | 345 | 1,197 | 451 | 476 | 2,124 | 49 | 1,695 | 2,223 | 82 | 0 | 4,049 | 149 | 3,264 | 9,931 |
| Catalyst | 956 | 26 | 982 | 981 | 145 | 279 | 1,405 | 327 | 1,812 | 831 | 52 | 40 | 3,062 | 211 | 1,041 | 6,701 |
| Asphalt and Road Oil | 3,759 | 276 | 4,035 | 4,238 | 929 | 1,078 | 6,245 | 518 | 1,026 | 1,907 | 946 | 101 | 4,498 | 1,238 | 2,595 | 18,611 |
| Still Gas | 1,987 | 175 | 2,162 | 3,219 | 346 | 1,155 | 4,720 | 773 | 5,352 | 3,165 | 200 | 85 | 9,575 | 644 | 4,698 | 21,799 |
| Miscellaneous Products | 362 | 51 | 413 | 217 | 43 | 57 | 317 | 3 | 612 | 428 | 0 | 0 | 1,043 | 71 | 195 | 2,039 |
| Fuel Use | 12 | 0 | 12 | 0 | 0 | 0 | 0 | 1 | 0 | 42 | 0 | 0 | 43 | 0 | 2 | 57 |
| Non-Fuel Use | 350 | 51 | 401 | 217 | 43 | 57 | 317 | 2 | 612 | 386 | 0 | 0 | 1,000 | 71 | 193 | 1,982 |
| **Total Production** | **48,505** | **3,480** | **51,985** | **67,383** | **10,842** | **23,854** | **102,079** | **17,771** | **111,849** | **78,985** | **6,219** | **2,504** | **217,328** | **15,959** | **88,456** | **475,807** |
| Processing Gain(-) or Loss(+)[1] | -2,243 | -45 | -2,288 | -2,630 | -455 | -777 | -3,862 | -560 | -4,057 | -3,956 | -78 | -45 | -8,696 | -345 | -4,441 | -19,632 |

[1] Represents the arithmetic difference between input and output.

* Effective January 1987 "Appalachian No.2" is combined with "Ind., Ill., Ky.".

Sources and estimation procedures: See Explanatory Notes 1 and 2.

| Commodity | PAD District I |  |  | PAD District II |  |  |  | PAD District III |  |  |  |  |  | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | East Coast | Appalachian No.1 | Total | Ind., Ill., Ky. * | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast |  |
| Liquefied Refinery Gases | 4.1 | 0.8 | 3.8 | 3.2 | 2.6 | 2.3 | 2.9 | 1.4 | 4.5 | 5.9 | 1.9 | 4.4 | 4.6 | 2.8 | 2.7 | 3.8 |
| Finished Motor Gasoline[2] | 45.0 | 36.0 | 44.4 | 53.1 | 49.1 | 50.3 | 52.0 | 50.5 | 46.3 | 46.1 | 25.4 | 50.4 | 46.0 | 47.8 | 44.0 | 46.8 |
| Finished Aviation Gasoline[3] | .0 | .0 | .0 | .2 | .2 | .1 | .2 | .8 | .3 | .3 | .0 | .0 | .3 | .2 | .2 | .2 |
| Naphtha-Type Jet Fuel | 2.0 | 0 | 1.8 | .6 | .4 | 1.1 | .7 | 4.4 | 1.1 | .9 | 3.7 | 13.2 | 1.5 | 3.0 | 1.8 | 1.5 |
| Kerosene-Type Jet Fuel | 5.9 | .0 | 5.5 | 6.0 | 5.0 | 5.9 | 5.9 | 6.3 | 7.9 | 10.4 | 3.1 | 1.8 | 8.5 | 5.8 | 11.9 | 8.1 |
| Kerosene | -.1 | 1.5 | .0 | .3 | .0 | .2 | .2 | .0 | 1.0 | .7 | .7 | 0 | .8 | -.2 | .2 | .5 |
| Distillate Fuel Oil | 20.2 | 31.2 | 20.9 | 18.6 | 26.0 | 26.1 | 21.1 | 24.3 | 18.6 | 19.5 | 27.4 | 21.6 | 19.7 | 24.7 | 15.9 | 19.6 |
| Residual Fuel Oil | 9.5 | 1.6 | 8.9 | 2.5 | 2.4 | .5 | 2.1 | 2.8 | 5.0 | 6.9 | 5.3 | .7 | 5.5 | 1.9 | 13.1 | 6.4 |
| Naphtha < 400 Deg. for Petro. Feed. Use | .8 | 0 | .8 | 1.0 | 0 | .5 | .8 | 1.1 | 1.9 | .1 | .6 | -.1 | 1.1 | .0 | .1 | .8 |
| Other Oils > 400 Deg. for Petro. Feed. Use | .0 | 0 | .0 | 1.4 | 0 | .3 | 1.0 | .8 | 4.5 | 1.9 | 0 | 0 | 3.1 | .1 | .4 | 1.7 |
| Special Naphthas | .2 | .6 | .2 | .6 | 0 | .4 | .5 | .4 | .7 | .1 | 2.8 | 0 | .5 | .0 | .1 | .4 |
| Lubricants | 1.0 | 11.3 | 1.7 | .8 | 0 | 1.6 | .9 | .2 | 1.9 | .8 | 7.6 | 0 | 1.5 | .2 | .7 | 1.2 |
| Waxes | 0 | 2.8 | .2 | .1 | 0 | .2 | .1 | .1 | .1 | .1 | 1.0 | 0 | .1 | .6 | .1 | .1 |
| Petroleum Coke | 2.9 | .8 | 2.7 | 3.5 | 5.8 | 3.5 | 3.8 | 2.4 | 3.3 | 4.3 | 2.3 | 1.8 | 3.6 | 2.4 | 5.2 | 3.8 |
| Asphalt and Road Oil | 8.4 | 8.1 | 8.4 | 6.9 | 9.1 | 5.0 | 6.7 | 3.3 | 1.0 | 2.7 | 16.3 | 4.4 | 2.2 | 8.2 | 3.1 | 4.2 |
| Still Gas | 4.4 | 5.1 | 4.5 | 5.2 | 3.4 | 5.3 | 5.0 | 4.9 | 5.1 | 4.5 | 3.4 | 3.7 | 4.8 | 4.3 | 5.7 | 5.0 |
| Miscellaneous Products | .8 | 1.5 | .9 | .4 | .4 | .3 | .3 | .0 | .6 | .6 | 0 | 0 | .5 | .5 | .2 | .5 |
| Processing Gain(-) or Loss(+)[4] | -5.0 | -1.3 | -4.7 | -4.3 | -4.5 | -3.6 | -4.1 | -3.5 | -3.9 | -5.6 | -1.3 | -2.0 | -4.3 | -2.3 | -5.3 | -4.5 |

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[1] Based on crude oil input and net reruns of unfinished oils.

[2] Based on total finished motor gasoline output plus net output of motor gasoline blending components, minus input of natural gas plant liquids, other hydrocarbons and alcohol.

[3] Based on finished aviation gasoline output plus net output of aviation gasoline blending components.

[4] Represents the difference between Input and Production.

Note: Total may not equal sum of components due to independent rounding.

* Effective January 1987 "Appalachian No.2" is combined with "Ind., Ill., Ky."

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 16. Imports of Crude Oil and Petroleum Products by PAD District, July 1988
(Thousand Barrels)

| Commodity | Petroleum Administration for Defense Districts | | | | | | Daily Average |
|---|---|---|---|---|---|---|---|
| | I | II | III | IV | V | Total | |
| **Crude Oil (including lease condensate)** [1] [2] | **35,162** | **26,001** | **89,009** | **2,108** | **2,921** | **155,201** | **5,006** |
| **Natural Gas Liquids** | **1,050** | **1,939** | **3,926** | **240** | **105** | **7,260** | **234** |
| Pentanes Plus | 0 | 35 | 2 | 0 | 0 | 37 | 1 |
| Liquefied Petroleum Gases | 1,050 | 1,904 | 3,924 | 240 | 105 | 7,223 | 233 |
| Ethane | 6 | 0 | (s) | 0 | 2 | 8 | (s) |
| Propane | 858 | 1,148 | 1,778 | 101 | 19 | 3,903 | 126 |
| Normal Butane | 121 | 492 | 1,390 | 90 | 55 | 2,148 | 69 |
| Isobutane | 65 | 265 | 756 | 49 | 30 | 1,164 | 38 |
| **Other Liquids** [1] | **6,339** | **0** | **8,311** | **0** | **0** | **14,650** | **473** |
| Unfinished Oils [1] | 4,362 | 0 | 8,028 | 0 | 0 | 12,390 | 400 |
| Naphthas and Lighter | 534 | 0 | 2,455 | 0 | 0 | 2,989 | 96 |
| Kerosene and Light Gas Oils | 0 | 0 | 367 | 0 | 0 | 367 | 12 |
| Heavy Gas Oils | 2,763 | 0 | 470 | 0 | 0 | 3,233 | 104 |
| Residuum | 1,065 | 0 | 4,736 | 0 | 0 | 5,801 | 187 |
| Motor Gasoline Blending Components | 1,977 | 0 | 283 | 0 | 0 | 2,260 | 73 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Finished Petroleum Products** | **33,643** | **900** | **3,056** | **139** | **1,978** | **39,716** | **1,281** |
| Finished Motor Gasoline | 12,092 | 117 | 988 | 75 | 1,018 | 14,290 | 461 |
| Finished Leaded Motor Gasoline | 194 | 13 | 0 | 6 | 37 | 250 | 8 |
| Finished Unleaded Motor Gasoline | 11,898 | 104 | 988 | 69 | 981 | 14,040 | 453 |
| Finished Aviation Gasoline | 0 | 0 | 0 | 0 | 6 | 6 | (s) |
| Naphtha-Type Jet Fuel | 0 | 91 | 0 | 0 | 7 | 98 | 3 |
| Kerosene-Type Jet Fuel | 1,553 | 363 | 90 | 0 | 420 | 2,426 | 78 |
| Bonded Aircraft Fuel | 858 | 363 | 65 | 0 | 420 | 1,706 | 55 |
| Other | 695 | 0 | 25 | 0 | 0 | 720 | 23 |
| Kerosene | 13 | 0 | 0 | 0 | 0 | 13 | (s) |
| Distillate Fuel Oil | 5,782 | 158 | 299 | 58 | 72 | 6,369 | 205 |
| Bonded Ships Bunkers | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 5,782 | 158 | 299 | 58 | 72 | 6,369 | 205 |
| Residual Fuel Oil | 12,685 | 64 | 524 | 0 | 258 | 13,531 | 436 |
| Bonded Ships Bunkers | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 12,685 | 64 | 524 | 0 | 258 | 13,531 | 436 |
| Naphtha < 400 Deg. for Petro. Feed. Use | 166 | 14 | 973 | 0 | 73 | 1,226 | 40 |
| Other Oils > 400 Deg. for Petro. Feed. Use | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Special Naphthas | 73 | 30 | 97 | 0 | 9 | 209 | 7 |
| Lubricants | 259 | 13 | 40 | 0 | 0 | 312 | 10 |
| Waxes | 33 | 11 | 3 | 0 | 3 | 50 | 2 |
| Petroleum Coke | 17 | 0 | 0 | 0 | 26 | 43 | 1 |
| Asphalt and Road Oil | 909 | 37 | 17 | 6 | 86 | 1,055 | 34 |
| Miscellaneous Products | 61 | 2 | 25 | 0 | 0 | 88 | 3 |
| **Total Imports** | **76,194** | **28,840** | **104,303** | **2,487** | **5,004** | **216,828** | **6,994** |

[1] Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

[2] Includes crude oil imported for storage in the Strategic Petroleum Reserve.

(s) = Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

(Thousand Barrels)

| Commodity | Petroleum Administration for Defense Districts | | | | | | Total (Daily Average) |
|---|---|---|---|---|---|---|---|
| | I | II | III | IV | V | Total | |
| **Crude Oil (including lease condensate)** [1] [2] | **242,519** | **196,527** | **565,970** | **12,978** | **32,624** | **1,050,618** | **4,932** |
| **Natural Gas Liquids** | **9,451** | **18,423** | **11,548** | **2,859** | **1,866** | **44,147** | **207** |
| Pentanes plus | 1,539 | 237 | 221 | 153 | 0 | 2,150 | 10 |
| Liquefied Petroleum Gases | 7,912 | 18,186 | 11,327 | 2,706 | 1,866 | 41,997 | 197 |
| Ethane | 36 | 110 | 62 | 1 | 36 | 244 | 1 |
| Propane | 4,944 | 12,001 | 3,300 | 1,351 | 327 | 21,924 | 103 |
| Normal Butane | 1,811 | 3,785 | 5,078 | 844 | 939 | 12,458 | 58 |
| Isobutane | 1,120 | 2,290 | 2,887 | 510 | 564 | 7,371 | 35 |
| **Other Liquids** [1] | **36,182** | **1,126** | **51,746** | **0** | **1,162** | **90,216** | **424** |
| Unfinished Oils [1] | 25,042 | 1,105 | 50,862 | 0 | 855 | 77,864 | 366 |
| Naphthas and Lighter | 1,773 | 238 | 10,543 | 0 | 254 | 12,808 | 60 |
| Kerosene and Light Gas Oils | 217 | 0 | 1,584 | 0 | 0 | 1,801 | 8 |
| Heavy Gas Oils | 17,338 | 499 | 6,992 | 0 | 357 | 25,186 | 118 |
| Residuum | 5,714 | 368 | 31,743 | 0 | 244 | 38,069 | 179 |
| Motor Gasoline Blending Components | 11,140 | 21 | 884 | 0 | 307 | 12,352 | 58 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Finished Petroleum Products** | **254,949** | **7,211** | **25,489** | **870** | **10,389** | **298,908** | **1,403** |
| Finished Motor Gasoline | 72,866 | 700 | 2,567 | 352 | 4,349 | 80,834 | 380 |
| Finished Leaded Motor Gasoline | 2,908 | 18 | 39 | 18 | 147 | 3,130 | 15 |
| Finished Unleaded Motor Gasoline | 69,958 | 682 | 2,528 | 334 | 4,202 | 77,704 | 365 |
| Finished Aviation Gasoline | 0 | 0 | 13 | 0 | 100 | 113 | 1 |
| Naphtha-Type Jet Fuel | 0 | 597 | 0 | 0 | 23 | 620 | 3 |
| Kerosene-Type Jet Fuel | 11,393 | 3,447 | 615 | 0 | 1,974 | 17,429 | 82 |
| Bonded Aircraft Fuel | 6,743 | 3,447 | 464 | 0 | 1,675 | 12,329 | 58 |
| Other | 4,650 | 0 | 151 | 0 | 299 | 5,100 | 24 |
| Kerosene | 1,867 | 0 | 716 | 0 | 0 | 2,583 | 12 |
| Distillate Fuel Oil | 51,300 | 1,060 | 602 | 493 | 621 | 54,076 | 254 |
| Bonded Ships Bunkers | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 51,300 | 1,060 | 602 | 493 | 621 | 54,076 | 254 |
| Residual Fuel Oil | 107,746 | 617 | 5,192 | 0 | 2,210 | 115,765 | 543 |
| Bonded Ships Bunkers | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 107,746 | 617 | 5,192 | 0 | 2,210 | 115,765 | 543 |
| Naphtha < 400 Deg. for Petro. Feed. Use | 1,358 | 93 | 12,409 | 0 | 219 | 14,079 | 66 |
| Other Oils > 400 Deg. for Petro. Feed. Use | 0 | 0 | 545 | 0 | 214 | 759 | 4 |
| Special Naphthas | 313 | 383 | 2,247 | 1 | 57 | 3,001 | 14 |
| Lubricants | 2,019 | 81 | 184 | 0 | 70 | 2,354 | 11 |
| Waxes | 210 | 91 | 13 | 5 | 36 | 355 | 2 |
| Petroleum Coke | 37 | 0 | 104 | 0 | 126 | 267 | 1 |
| Asphalt and Road Oil | 5,521 | 120 | 247 | 19 | 390 | 6,297 | 30 |
| Miscellaneous Products | 319 | 22 | 35 | 0 | 0 | 376 | 2 |
| **Total Imports** | **543,101** | **223,287** | **654,754** | **16,707** | **46,040** | **1,483,889** | **6,967** |

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[1] Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

[2] Includes crude oil imported for storage in the Strategic Petroleum Reserve.

(s) = Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 18. Imports of Crude Oil and Petroleum Products by Source and PAD District,[1] July 1988
(Thousand Barrels)

| Source | Crude Oil [2] | LPG | Unfin- ished Oils | Gasoline Blending Compo- nents | Finished Motor Gasoline | Jet Fuel | Kero- sene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Prod- ucts [3] | Total Prod- ucts | Total Petro- leum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | All PAD Districts | | | | | | | | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Algeria | 3,499 | 345 | 1,065 | 0 | 0 | 0 | 0 | 0 | 1,076 | 0 | 0 | 2,486 | 5,985 | 193 |
| Iraq | 18,151 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18,151 | 586 |
| Saudi Arabia | 24,771 | 3,459 | 3,642 | 0 | 839 | 371 | 0 | 264 | 0 | 0 | 0 | 8,575 | 33,346 | 1,076 |
| United Arab Emirates | 1,082 | 0 | 250 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 250 | 1,332 | 43 |
| Subtotal Arab OPEC | 47,503 | 3,804 | 4,957 | 0 | 839 | 371 | 0 | 264 | 1,076 | 0 | 0 | 11,311 | 58,814 | 1,897 |
| **Other OPEC** | | | | | | | | | | | | | | |
| Ecuador | 359 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 361 | 0 | 0 | 361 | 720 | 23 |
| Indonesia | 6,134 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6,134 | 198 |
| Nigeria | 18,914 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 125 | 0 | 0 | 125 | 19,039 | 614 |
| Venezuela | 13,642 | 0 | 928 | 0 | 2,120 | 728 | 0 | 2,860 | 877 | 0 | 739 | 8,252 | 21,894 | 706 |
| Subtotal Other OPEC | 39,049 | 0 | 928 | 0 | 2,120 | 728 | 0 | 2,860 | 1,363 | 0 | 739 | 8,738 | 47,787 | 1,542 |
| **Other** | | | | | | | | | | | | | | |
| Angola | 5,167 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5,167 | 167 |
| Argentina | 368 | 0 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 28 | 396 | 13 |
| Australia | 1,649 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,649 | 53 |
| Bahama Islands | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 453 | 0 | 0 | 453 | 453 | 15 |
| Belgium | 0 | 0 | 165 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 165 | 165 | 5 |
| Benin | 313 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 313 | 10 |
| Brazil | 0 | 48 | 0 | 0 | 2,679 | 0 | 0 | 0 | 630 | 0 | 16 | 3,373 | 3,373 | 109 |
| Cameroon | 840 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 365 | 0 | 0 | 365 | 1,205 | 39 |
| Canada | 21,340 | 2,546 | 399 | 0 | 1,659 | 226 | 13 | 2,099 | 1,029 | 124 | 381 | 8,477 | 29,817 | 962 |
| China, People's Republic | 2,889 | 0 | 0 | 0 | 424 | 0 | 0 | 0 | 0 | 0 | 40 | 464 | 3,353 | 108 |
| China, Taiwan | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 8 | (s) |
| Colombia | 2,303 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 963 | 0 | 0 | 963 | 3,266 | 105 |
| Congo | 1,781 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,781 | 57 |
| Egypt | 490 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 490 | 16 |
| France | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 0 | 385 | 0 | 72 | 457 | 457 | 15 |
| Germany, FD (W) | 0 | 1 | 359 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 363 | 363 | 12 |
| Greece | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 250 | 0 | 0 | 250 | 250 | 8 |
| Hungary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | (s) |
| India | 0 | 0 | 1,150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 651 | 1,801 | 1,801 | 58 |
| Israel | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 13 | 13 | (s) |
| Italy | 0 | 0 | 550 | 0 | 498 | 214 | 0 | 226 | 0 | 0 | 31 | 1,519 | 1,519 | 49 |
| Japan | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 62 | 62 | 62 | 2 |
| Korea, Republic | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 37 | 38 | 38 | 1 |
| Malaysia | 418 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 418 | 13 |
| Mexico | 20,296 | 812 | 0 | 283 | 97 | 367 | 0 | 0 | 523 | 0 | 38 | 2,120 | 22,416 | 723 |
| Netherlands Antilles | 0 | 0 | 0 | 0 | 482 | 0 | 0 | 0 | 598 | 0 | 0 | 1,080 | 1,080 | 35 |
| Netherlands | 0 | 2 | 668 | 0 | 2,113 | 0 | 0 | 0 | 0 | 62 | 25 | 2,870 | 2,870 | 93 |
| Norway | 1,927 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 212 | 0 | 0 | 212 | 2,139 | 69 |
| Oman | 299 | 0 | 149 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 149 | 448 | 14 |
| Panama | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 10 | 10 | (s) |
| Peru | 753 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 330 | 0 | 0 | 330 | 1,083 | 35 |
| Puerto Rico | 0 | 0 | 194 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 501 | 695 | 695 | 22 |
| Romania | 0 | 0 | 0 | 1,571 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,571 | 1,571 | 51 |
| Singapore | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 660 | 0 | 0 | 660 | 660 | 21 |
| South Africa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 14 | 14 | (s) |

See footnotes at end of table.

(Thousand Barrels)

| Source | Crude Oil 2 | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Products 3 | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **All PAD Districts (continued)** | | | | | | | | | | | | | |
| **Other (continued)** | | | | | | | | | | | | | | |
| Spain | 0 | 0 | 440 | 0 | 837 | 0 | 0 | 0 | 705 | 0 | 56 | 2,038 | 2,038 | 66 |
| Sweden | 0 | 0 | 146 | 0 | 0 | 0 | 0 | 0 | 328 | 0 | 105 | 579 | 579 | 19 |
| Switzerland | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | (s) | (s) |
| Trinidad and Tobago | 1,850 | 0 | 0 | 0 | 0 | 202 | 0 | 233 | 681 | 0 | 0 | 1,116 | 2,966 | 96 |
| Turkey | 0 | 0 | 695 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 695 | 695 | 22 |
| United Kingdom | 4,863 | (s) | 0 | 0 | 817 | 36 | 0 | 51 | 641 | 0 | 45 | 1,590 | 6,453 | 208 |
| U.S.S.R. | 0 | 0 | 0 | 0 | 246 | 0 | 0 | 142 | 0 | 0 | 0 | 388 | 388 | 13 |
| Virgin Islands | 0 | 0 | 1,590 | 388 | 1,479 | 381 | 0 | 494 | 2,329 | 0 | 0 | 6,661 | 6,661 | 215 |
| Zaire | 1,103 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,103 | 36 |
| Subtotal Other | 68,649 | 3,419 | 6,505 | 2,260 | 11,331 | 1,426 | 13 | 3,245 | 11,092 | 209 | 2,078 | 41,578 | 110,227 | 3,556 |
| **Total Imports** | **155,201** | **7,223** | **12,390** | **2,260** | **14,290** | **2,524** | **13** | **6,369** | **13,531** | **209** | **2,817** | **61,627** | **216,828** | **6,994** |
| | **PAD District I** | | | | | | | | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Algeria | 0 | 0 | 1,065 | 0 | 0 | 0 | 0 | 0 | 1,076 | 0 | 0 | 2,141 | 2,141 | 69 |
| Iraq | 3,620 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,620 | 117 |
| Saudi Arabia | 1,332 | 740 | 0 | 0 | 522 | 371 | 0 | 264 | 0 | 0 | 0 | 1,897 | 3,229 | 104 |
| Subtotal Arab OPEC | 4,952 | 740 | 1,065 | 0 | 522 | 371 | 0 | 264 | 1,076 | 0 | 0 | 4,038 | 8,990 | 290 |
| **Other OPEC** | | | | | | | | | | | | | | |
| Ecuador | 359 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 361 | 0 | 0 | 361 | 720 | 23 |
| Indonesia | 838 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 838 | 27 |
| Nigeria | 11,759 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 125 | 0 | 0 | 125 | 11,884 | 383 |
| Venezuela | 4,501 | 0 | 238 | 0 | 1,644 | 522 | 0 | 2,860 | 877 | 0 | 669 | 6,810 | 11,311 | 365 |
| Subtotal Other OPEC | 17,457 | 0 | 238 | 0 | 1,644 | 522 | 0 | 2,860 | 1,363 | 0 | 669 | 7,296 | 24,753 | 798 |
| **Other** | | | | | | | | | | | | | | |
| Angola | 801 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 801 | 26 |
| Argentina | 368 | 0 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 386 | 12 |
| Australia | 747 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 747 | 24 |
| Bahama Islands | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 453 | 0 | 0 | 453 | 453 | 15 |
| Belgium | 0 | 0 | 165 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 165 | 165 | 5 |
| Brazil | 0 | 0 | 0 | 0 | 2,415 | 0 | 0 | 0 | 630 | 0 | 16 | 3,061 | 3,061 | 99 |
| Cameroon | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 365 | 0 | 0 | 365 | 365 | 12 |
| Canada | 2,257 | 300 | 5 | 0 | 1,287 | 128 | 13 | 1,512 | 965 | 11 | 227 | 4,449 | 6,706 | 216 |
| China, People's Republic | 1,388 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,388 | 45 |
| China, Taiwan | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 8 | (s) |
| Colombia | 481 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 963 | 0 | 0 | 963 | 1,444 | 47 |
| Egypt | 490 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 490 | 16 |
| France | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 0 | 385 | 0 | 0 | 385 | 385 | 12 |
| Germany, FD (W) | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3 | 3 | (s) |
| Greece | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 250 | 0 | 0 | 250 | 250 | 8 |
| Hungary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | (s) |
| India | 0 | 0 | 291 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 291 | 291 | 9 |
| Italy | 0 | 0 | 0 | 0 | 498 | 0 | 0 | 226 | 0 | 0 | 0 | 724 | 724 | 23 |
| Japan | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 19 | 19 | 1 |

See footnotes at end of table.

## Table 18. Imports of Crude Oil and Petroleum Products by Source and PAD District,[1] July 1988 (continued)
(Thousand Barrels)

| Source | Crude Oil [2] | LPG | Unfin-ished Oils | Gasoline Blending Compo-nents | Finished Motor Gasoline | Jet Fuel | Kero-sene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Prod-ucts [3] | Total Prod-ucts | Total Petro-leum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | **PAD District I (continued)** | | | | | | | |
| **Other (continued)** | | | | | | | | | | | | | | |
| Korea, Republic | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | (s) |
| Mexico | 2,006 | 0 | 0 | 0 | 0 | 46 | 0 | 0 | 0 | 0 | 0 | 46 | 2,052 | 66 |
| Netherlands Antilles | 0 | 0 | 0 | 0 | 234 | 0 | 0 | 0 | 598 | 0 | 0 | 832 | 832 | 27 |
| Netherlands | 0 | 0 | 668 | 0 | 2,113 | 0 | 0 | 0 | 0 | 62 | 0 | 2,843 | 2,843 | 92 |
| Norway | 980 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 212 | 0 | 0 | 212 | 1,192 | 38 |
| Panama | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 10 | 10 | (s) |
| Peru | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 330 | 0 | 0 | 330 | 330 | 11 |
| Puerto Rico | 0 | 0 | 194 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 401 | 595 | 595 | 19 |
| Romania | 0 | 0 | 0 | 1,571 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,571 | 1,571 | 51 |
| Singapore | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 402 | 0 | 0 | 402 | 402 | 13 |
| South Africa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 9 | 9 | (s) |
| Spain | 0 | 0 | 0 | 0 | 837 | 0 | 0 | 0 | 704 | 0 | 56 | 1,597 | 1,597 | 52 |
| Sweden | 0 | 0 | 146 | 0 | 0 | 0 | 0 | 0 | 328 | 0 | 0 | 474 | 474 | 15 |
| Switzerland | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | (s) | (s) |
| Trinidad and Tobago | 470 | 0 | 0 | 0 | 0 | 70 | 0 | 233 | 681 | 0 | 0 | 984 | 1,454 | 47 |
| United Kingdom | 2,116 | (s) | 0 | 0 | 817 | 36 | 0 | 51 | 641 | 0 | 45 | 1,590 | 3,706 | 120 |
| U.S.S.R. | 0 | 0 | 0 | 0 | 246 | 0 | 0 | 142 | 0 | 0 | 0 | 388 | 388 | 13 |
| Virgin Islands | 0 | 0 | 1,590 | 388 | 1,479 | 381 | 0 | 494 | 2,329 | 0 | 0 | 6,661 | 6,661 | 215 |
| Zaire | 649 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 649 | 21 |
| Subtotal Other | 12,753 | 310 | 3,059 | 1,977 | 9,926 | 661 | 13 | 2,658 | 10,246 | 73 | 776 | 29,698 | 42,451 | 1,369 |
| **Total Imports** | **35,162** | **1,050** | **4,362** | **1,977** | **12,092** | **1,553** | **13** | **5,782** | **12,685** | **73** | **1,445** | **41,032** | **76,194** | **2,458** |
| | | | | | | | **PAD District II** | | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Algeria | 430 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 430 | 14 |
| Iraq | 1,003 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,003 | 32 |
| Saudi Arabia | 6,193 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6,193 | 200 |
| Subtotal Arab OPEC | 7,626 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7,626 | 246 |
| **Other** | | | | | | | | | | | | | | |
| Canada | 16,665 | 1,904 | 0 | 0 | 117 | 91 | 0 | 158 | 64 | 30 | 109 | 2,473 | 19,138 | 617 |
| Mexico | 957 | 0 | 0 | 0 | 0 | 231 | 0 | 0 | 0 | 0 | 0 | 231 | 1,188 | 38 |
| Peru | 753 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 753 | 24 |
| South Africa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 3 | (s) |
| Trinidad and Tobago | 0 | 0 | 0 | 0 | 0 | 132 | 0 | 0 | 0 | 0 | 0 | 132 | 132 | 4 |
| Subtotal Other | 18,375 | 1,904 | 0 | 0 | 117 | 454 | 0 | 158 | 64 | 30 | 112 | 2,839 | 21,214 | 684 |
| **Total Imports** | **26,001** | **1,904** | **0** | **0** | **117** | **454** | **0** | **158** | **64** | **30** | **112** | **2,839** | **28,840** | **930** |
| | | | | | | | **PAD District III** | | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Algeria | 3,069 | 345 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 345 | 3,414 | 110 |
| Iraq | 13,528 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13,528 | 436 |
| Saudi Arabia | 17,246 | 2,718 | 3,642 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6,360 | 23,606 | 761 |
| United Arab Emirates | 1,082 | 0 | 250 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 250 | 1,332 | 43 |

See footnotes at end of table.

(Thousand Barrels)

| Source | Crude Oil 2 | LPG | Unfin-ished Oils | Gasoline Blending Compo-nents | Finished Motor Gasoline | Jet Fuel | Kero-sene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Prod-ucts 3 | Total Prod-ucts | Total Petro-leum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **PAD District III (continued)** | | | | | | | | | | | | | |
| **Arab OPEC (continued)** | | | | | | | | | | | | | | |
| Subtotal Arab OPEC | 34,925 | 3,064 | 3,892 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6,956 | 41,881 | 1,351 |
| **Other OPEC** | | | | | | | | | | | | | | |
| Indonesia | 3,338 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,338 | 108 |
| Nigeria | 7,155 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7,155 | 231 |
| Venezuela | 9,141 | 0 | 690 | 0 | 476 | 0 | 0 | 0 | 0 | 0 | 0 | 1,166 | 10,307 | 332 |
| Subtotal Other OPEC | 19,634 | 0 | 690 | 0 | 476 | 0 | 0 | 0 | 0 | 0 | 0 | 1,166 | 20,800 | 671 |
| **Other** | | | | | | | | | | | | | | |
| Angola | 4,366 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,366 | 141 |
| Argentina | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 10 | 10 | (s) |
| Australia | 667 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 667 | 22 |
| Benin | 313 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 313 | 10 |
| Brazil | 0 | 48 | 0 | 0 | 264 | 0 | 0 | 0 | 0 | 0 | 0 | 312 | 312 | 10 |
| Cameroon | 840 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 840 | 27 |
| Canada | 0 | (s) | 394 | 0 | 0 | 0 | 0 | 299 | 0 | 74 | 7 | 774 | 774 | 25 |
| China, People's Republic | 1,501 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 40 | 1,541 | 50 |
| Colombia | 1,822 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,822 | 59 |
| Congo | 1,781 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,781 | 57 |
| France | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 72 | 72 | 72 | 2 |
| Germany, FD (W) | 0 | 0 | 359 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 360 | 360 | 12 |
| India | 0 | 0 | 859 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 651 | 1,510 | 1,510 | 49 |
| Israel | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 13 | 13 | (s) |
| Italy | 0 | 0 | 550 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 31 | 581 | 581 | 19 |
| Japan | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 7 | 7 | (s) |
| Mexico | 17,333 | 812 | 0 | 283 | 0 | 90 | 0 | 0 | 523 | 0 | 19 | 1,727 | 19,060 | 615 |
| Netherlands Antilles | 0 | 0 | 0 | 0 | 248 | 0 | 0 | 0 | 0 | 0 | 0 | 248 | 248 | 8 |
| Netherlands | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 25 | 25 | 1 |
| Norway | 947 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 947 | 31 |
| Oman | 299 | 0 | 149 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 149 | 448 | 14 |
| Puerto Rico | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 100 | 3 |
| South Africa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | (s) |
| Spain | 0 | 0 | 440 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 441 | 441 | 14 |
| Sweden | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 105 | 105 | 105 | 3 |
| Trinidad and Tobago | 1,380 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,380 | 45 |
| Turkey | 0 | 0 | 695 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 695 | 695 | 22 |
| United Kingdom | 2,747 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,747 | 89 |
| Zaire | 454 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 454 | 15 |
| Subtotal Other | 34,450 | 861 | 3,446 | 283 | 512 | 90 | 0 | 299 | 524 | 97 | 1,060 | 7,172 | 41,622 | 1,343 |
| **Total Imports** | **89,009** | **3,924** | **8,028** | **283** | **988** | **90** | **0** | **299** | **524** | **97** | **1,060** | **15,294** | **104,303** | **3,365** |
| | **PAD District IV** | | | | | | | | | | | | | |
| **Other** | | | | | | | | | | | | | | |
| Canada | 2,108 | 240 | 0 | 0 | 75 | 0 | 0 | 58 | 0 | 0 | 6 | 379 | 2,487 | 80 |
| Subtotal Other | 2,108 | 240 | 0 | 0 | 75 | 0 | 0 | 58 | 0 | 0 | 6 | 379 | 2,487 | 80 |

See footnotes at end of table.

## Table 18. Imports of Crude Oil and Petroleum Products by Source and PAD District,[1] July 1988 (continued)

(Thousand Barrels)

| Source | Crude Oil[2] | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Products[3] | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **PAD District IV (continued)** | | | | | | | | | | | | | |
| **Other (continued)** | | | | | | | | | | | | | | |
| **Total Imports** | **2,108** | **240** | **0** | **0** | **75** | **0** | **0** | **58** | **0** | **0** | **6** | **379** | **2,487** | **80** |
| | **PAD District V** | | | | | | | | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Saudi Arabia | 0 | 0 | 0 | 0 | 317 | 0 | 0 | 0 | 0 | 0 | 0 | 317 | 317 | 10 |
| Subtotal Arab OPEC | 0 | 0 | 0 | 0 | 317 | 0 | 0 | 0 | 0 | 0 | 0 | 317 | 317 | 10 |
| **Other OPEC** | | | | | | | | | | | | | | |
| Indonesia | 1,958 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,958 | 63 |
| Venezuela | 0 | 0 | 0 | 0 | 0 | 206 | 0 | 0 | 0 | 0 | 70 | 276 | 276 | 9 |
| Subtotal Other OPEC | 1,958 | 0 | 0 | 0 | 0 | 206 | 0 | 0 | 0 | 0 | 70 | 276 | 2,234 | 72 |
| **Other** | | | | | | | | | | | | | | |
| Australia | 235 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 235 | 8 |
| Canada | 310 | 102 | 0 | 0 | 180 | 7 | 0 | 72 | 0 | 9 | 32 | 402 | 712 | 23 |
| China, People's Republic | 0 | 0 | 0 | 0 | 424 | 0 | 0 | 0 | 0 | 0 | 0 | 424 | 424 | 14 |
| Italy | 0 | 0 | 0 | 0 | 0 | 214 | 0 | 0 | 0 | 0 | 0 | 214 | 214 | 7 |
| Japan | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 36 | 36 | 36 | 1 |
| Korea, Republic | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 37 | 37 | 37 | 1 |
| Malaysia | 418 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 418 | 13 |
| Mexico | 0 | 0 | 0 | 0 | 97 | 0 | 0 | 0 | 0 | 0 | 19 | 116 | 116 | 4 |
| Netherlands | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | (s) |
| Singapore | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 258 | 0 | 0 | 258 | 258 | 8 |
| Subtotal Other | 963 | 105 | 0 | 0 | 701 | 221 | 0 | 72 | 258 | 9 | 124 | 1,490 | 2,453 | 79 |
| **Total Imports** | **2,921** | **105** | **0** | **0** | **1,018** | **427** | **0** | **72** | **258** | **9** | **194** | **2,083** | **5,004** | **161** |

[1] Crude Oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

[2] Includes crude oil imported for storage in the Strategic Petroleum Reserve.

[3] Includes aviation gasoline, aviation gasoline blending components, waxes, asphalt, lubricants, pentanes plus, naphthas less than 400 degrees F endpoint, other oils equal to or greater than 400 degrees F endpoint, petroleum coke and miscellaneous products.

[4] Beginning in January 1988, imports of crude oil and petroleum products from the Neutral Zone are shown separately. Prior to January 1988, these data were included with imports from Saudi Arabia and Kuwait.

(s) = Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 15. Year-to-Date Imports of Crude Oil and Petroleum Products by Source and PAD District, January - July
(Thousand Barrels)

| Source | Crude Oil [2] | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Products [3] | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | All PAD Districts | | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Algeria | 26,227 | 4,935 | 6,647 | 0 | 0 | 289 | 0 | 1,682 | 12,336 | 0 | 10,009 | 35,898 | 62,125 | 292 |
| Iraq | 59,958 | 0 | 407 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 407 | 60,365 | 283 |
| Kuwait | 10,291 | 0 | 2,637 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,637 | 12,928 | 61 |
| Neutral Zone[4] | 3,274 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,274 | 15 |
| Saudi Arabia | 178,235 | 4,163 | 20,485 | 335 | 4,574 | 1,458 | 325 | 2,752 | 0 | 0 | 660 | 34,752 | 212,987 | 1,000 |
| United Arab Emirates | 6,775 | 0 | 573 | 0 | 0 | 592 | 0 | 342 | 0 | 0 | 213 | 1,720 | 8,495 | 40 |
| Subtotal Arab OPEC | 284,760 | 9,098 | 30,749 | 335 | 4,574 | 2,339 | 325 | 4,776 | 12,336 | 0 | 10,882 | 75,414 | 360,174 | 1,691 |
| **Other OPEC** | | | | | | | | | | | | | | |
| Ecuador | 5,632 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,464 | 0 | 0 | 3,464 | 9,096 | 43 |
| Gabon | 4,434 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,434 | 21 |
| Indonesia | 36,388 | 0 | 1,176 | 0 | 0 | 0 | 0 | 0 | 968 | 0 | 214 | 2,358 | 38,746 | 182 |
| Iran | [5] 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | [5] 25 | [5] (s) |
| Nigeria | 116,409 | 0 | 603 | 0 | 0 | 0 | 0 | 256 | 1,401 | 0 | 0 | 2,260 | 118,669 | 557 |
| Venezuela | 102,164 | 1,517 | 11,284 | 395 | 7,688 | 5,568 | 0 | 15,341 | 21,017 | 3 | 4,229 | 67,042 | 169,206 | 794 |
| Subtotal Other OPEC | 265,052 | 1,517 | 13,063 | 395 | 7,688 | 5,568 | 0 | 15,597 | 26,850 | 3 | 4,443 | 75,124 | 340,176 | 1,597 |
| **Other** | | | | | | | | | | | | | | |
| Angola | 38,836 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,760 | 0 | 0 | 1,760 | 40,596 | 191 |
| Argentina | 425 | 0 | 0 | 18 | 223 | 0 | 0 | 0 | 1,006 | 236 | 17 | 1,500 | 1,925 | 9 |
| Australia | 10,999 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 642 | 0 | 131 | 773 | 11,772 | 55 |
| Bahama Islands | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 6,684 | 0 | 0 | 6,692 | 6,692 | 31 |
| Bahrain | 0 | 0 | 275 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 275 | 275 | 1 |
| Belgium | 0 | 0 | 2,181 | 208 | 1,368 | 0 | 0 | 0 | 893 | 0 | 12 | 4,662 | 4,662 | 22 |
| Benin | 956 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 956 | 4 |
| Bermuda | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 7 | (s) |
| Brazil | 0 | 461 | 15 | 0 | 14,034 | 0 | 219 | 1,065 | 4,289 | 18 | 59 | 20,160 | 20,160 | 95 |
| Brunei | 338 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 338 | 2 |
| Cameroon | 6,112 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,236 | 0 | 0 | 1,236 | 7,348 | 34 |
| Canada | 146,564 | 25,386 | 1,426 | 21 | 9,827 | 2,164 | 163 | 13,752 | 7,186 | 803 | 2,167 | 62,895 | 209,459 | 983 |
| China, People's Republic | 18,637 | 1 | 0 | 307 | 823 | 0 | 0 | 0 | 0 | 0 | 208 | 1,339 | 19,976 | 94 |
| China, Taiwan | 0 | 44 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 42 | 86 | 86 | (s) |
| Colombia | 20,591 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5,650 | 0 | 0 | 5,650 | 26,241 | 123 |
| Congo | 6,986 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 271 | 0 | 0 | 271 | 7,257 | 34 |
| Egypt | 3,932 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 7 | 3,939 | 18 |
| Finland | 0 | 0 | 0 | 0 | 292 | 0 | 0 | 0 | 0 | 0 | 0 | 292 | 292 | 1 |
| France | 0 | 36 | 0 | 0 | 1,006 | 0 | 0 | 0 | 1,136 | 0 | 164 | 2,342 | 2,342 | 11 |
| Germany, DR (E) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 656 | 0 | 0 | 0 | 656 | 656 | 3 |
| Germany, FD (W) | 0 | 10 | 359 | 0 | 310 | 0 | 0 | 0 | 252 | 4 | 49 | 984 | 984 | 5 |
| Ghana | 0 | 0 | 151 | 0 | 0 | 0 | 0 | 0 | 298 | 0 | 0 | 449 | 449 | 2 |
| Greece | 0 | 0 | 239 | 0 | 2,187 | 0 | 0 | 134 | 1,320 | 0 | 0 | 3,880 | 3,880 | 18 |
| Guatemala | 420 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 420 | 2 |
| Hong Kong | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | (s) | (s) |
| Hungary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 5 | (s) |
| India | 0 | 0 | 4,256 | 0 | 0 | 0 | 0 | 0 | 0 | 1,548 | 651 | 6,455 | 6,455 | 30 |
| Ireland | 0 | 0 | 174 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 174 | 174 | 1 |
| Israel | 0 | 0 | 0 | 0 | 850 | 0 | 0 | 0 | 0 | 36 | 0 | 886 | 886 | 4 |
| Italy | 1,578 | 1 | 3,534 | 0 | 6,429 | 550 | 0 | 981 | 1,152 | 94 | 73 | 12,813 | 14,391 | 68 |
| Japan | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 57 | 0 | 22 | 328 | 427 | 427 | 2 |
| Korea, Republic | 0 | 8 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 111 | 129 | 129 | 1 |

See footnotes at end of table.

## Table 19. Year-to-Date Imports of Crude Oil and Petroleum Products by Source and PAD District,[1] January - July 1988 (continued)
(Thousand Barrels)

| Source | Crude Oil 2 | LPG | Unfin-ished Oils | Gasoline Blending Compo-nents | Finished Motor Gasoline | Jet Fuel | Kero-sene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Prod-ucts 3 | Total Prod-ucts | Total Petro-leum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | All PAD Districts (continued) | | | | | | | |
| **Other (continued)** | | | | | | | | | | | | | | |
| Liberia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 210 | 0 | 0 | 0 | 210 | 210 | 1 |
| Malaysia | 1,206 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,206 | 6 |
| Mauritania | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 245 | 0 | 0 | 245 | 245 | 1 |
| Mexico | 141,938 | 5,284 | 0 | 440 | 514 | 2,612 | 0 | 943 | 1,830 | 0 | 1,461 | 13,084 | 155,022 | 728 |
| Netherlands Antilles | 0 | 0 | 0 | 0 | 981 | 0 | 0 | 450 | 5,081 | 0 | 0 | 6,512 | 6,512 | 31 |
| Netherlands | 0 | 10 | 726 | 66 | 8,142 | 0 | 151 | 1,182 | 1,551 | 99 | 233 | 12,160 | 12,160 | 57 |
| Norway | 9,158 | 0 | 488 | 0 | 0 | 0 | 0 | 0 | 273 | 0 | 351 | 1,112 | 10,270 | 48 |
| Oman | 2,439 | 0 | 986 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 986 | 3,425 | 16 |
| Panama | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 10 | 10 | (s) |
| Peru | 1,509 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5,663 | 0 | 0 | 5,663 | 7,172 | 34 |
| Philippines | 0 | 74 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 74 | 74 | (s) |
| Portugal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 | 20 | 48 | 48 | (s) |
| Puerto Rico | 0 | 0 | 955 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,665 | 4,620 | 4,620 | 22 |
| Romania | 0 | 0 | 0 | 8,106 | 3,243 | 0 | 0 | 867 | 527 | 0 | 0 | 12,743 | 12,743 | 60 |
| Singapore | 0 | 0 | 601 | 0 | 0 | 25 | 0 | 0 | 2,032 | 0 | 0 | 2,658 | 2,658 | 12 |
| South Africa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 210 | 0 | 64 | 274 | 274 | 1 |
| Spain | 0 | 40 | 1,808 | 142 | 5,688 | 1,239 | 0 | 0 | 1,557 | 0 | 1,107 | 11,581 | 11,581 | 54 |
| Sweden | 0 | 2 | 146 | 0 | 0 | 0 | 0 | 372 | 1,081 | 0 | 250 | 1,851 | 1,851 | 9 |
| Switzerland | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | (s) |
| Syria | 616 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 194 | 0 | 0 | 194 | 810 | 4 |
| Trinidad and Tobago | 14,826 | 0 | 0 | 0 | 138 | 633 | 115 | 434 | 4,469 | 0 | 0 | 5,789 | 20,615 | 97 |
| Tunisia | 0 | 0 | 220 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 220 | 220 | 1 |
| Turkey | 0 | 0 | 1,518 | 0 | 0 | 0 | 0 | 0 | 0 | 34 | 105 | 1,657 | 1,657 | 8 |
| United Kingdom | 64,774 | 7 | 1,537 | 0 | 5,594 | 244 | 0 | 1,238 | 2,139 | 68 | 143 | 10,970 | 75,744 | 356 |
| U.S.S.R. | 0 | 0 | 1,287 | 0 | 395 | 0 | 0 | 3,270 | 27 | 8 | 0 | 4,987 | 4,987 | 23 |
| Virgin Islands | 0 | 0 | 11,163 | 2,314 | 6,528 | 2,665 | 1,610 | 8,084 | 15,915 | 0 | 0 | 48,279 | 48,279 | 227 |
| Yemen (Sanaa) | 1,595 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,595 | 7 |
| Zaire | 6,371 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6,371 | 30 |
| Subtotal Other | 500,806 | 31,382 | 34,052 | 11,622 | 68,572 | 10,142 | 2,258 | 33,703 | 76,579 | 2,998 | 11,425 | 282,733 | 783,539 | 3,679 |
| **Total Imports** | **1,050,618** | **41,997** | **77,864** | **12,352** | **80,834** | **18,049** | **2,583** | **54,076** | **115,765** | **3,001** | **26,750** | **433,271** | **1,483,889** | **6,967** |
| | | | | | | | PAD District I | | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Algeria | 0 | 2,810 | 5,581 | 0 | 0 | 289 | 0 | 1,682 | 10,253 | 0 | 0 | 20,615 | 20,615 | 97 |
| Iraq | 4,826 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,826 | 23 |
| Neutral Zone4 | 650 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 650 | 3 |
| Saudi Arabia | 14,165 | 1,444 | 355 | 335 | 3,448 | 1,192 | 325 | 2,752 | 0 | 0 | 0 | 9,851 | 24,016 | 113 |
| United Arab Emirates | 769 | 0 | 0 | 0 | 0 | 0 | 0 | 342 | 0 | 0 | 0 | 342 | 1,111 | 5 |
| Subtotal Arab OPEC | 20,410 | 4,255 | 5,936 | 335 | 3,448 | 1,480 | 325 | 4,776 | 10,253 | 0 | 0 | 30,808 | 51,218 | 240 |
| **Other OPEC** | | | | | | | | | | | | | | |
| Ecuador | 3,778 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,464 | 0 | 0 | 3,464 | 7,242 | 34 |
| Gabon | 1,995 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,995 | 9 |
| Indonesia | 1,964 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 968 | 0 | 0 | 968 | 2,932 | 14 |
| Nigeria | 67,760 | 0 | 0 | 0 | 0 | 0 | 0 | 256 | 1,401 | 0 | 0 | 1,657 | 69,417 | 326 |
| Venezuela | 27,933 | 816 | 2,413 | 159 | 6,117 | 3,904 | 0 | 15,339 | 20,497 | 3 | 3,885 | 53,133 | 81,066 | 381 |
| Subtotal Other OPEC | 103,430 | 816 | 2,413 | 159 | 6,117 | 3,904 | 0 | 15,595 | 26,330 | 3 | 3,885 | 59,222 | 162,652 | 764 |

(Thousand Barrels)

| Source | Crude Oil 2 | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Products 3 | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | PAD District I (continued) | | | | | | | |
| **Other** | | | | | | | | | | | | | | |
| Angola | 19,316 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,760 | 0 | 0 | 1,760 | 21,076 | 99 |
| Argentina | 425 | 0 | 0 | 18 | 223 | 0 | 0 | 0 | 1,006 | 27 | 0 | 1,274 | 1,699 | 8 |
| Australia | 1,298 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 182 | 0 | 80 | 262 | 1,560 | 7 |
| Bahama Islands | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 6,457 | 0 | 0 | 6,465 | 6,465 | 30 |
| Belgium | 0 | 0 | 494 | 0 | 1,368 | 0 | 0 | 0 | 893 | 0 | 0 | 2,755 | 2,755 | 13 |
| Benin | 643 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 643 | 3 |
| Brazil | 0 | 0 | 15 | 0 | 13,042 | 0 | 219 | 1,065 | 4,289 | 17 | 59 | 18,706 | 18,706 | 88 |
| Cameroon | 3,769 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,236 | 0 | 0 | 1,236 | 5,005 | 23 |
| Canada | 12,996 | 2,782 | 574 | 0 | 7,802 | 1,214 | 163 | 11,035 | 5,752 | 88 | 936 | 30,347 | 43,343 | 203 |
| China, People's Republic | 7,795 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 98 | 98 | 7,893 | 37 |
| China, Taiwan | 0 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 30 | (s) |
| Colombia | 5,937 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5,650 | 0 | 0 | 5,650 | 11,587 | 54 |
| Congo | 1,218 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 271 | 0 | 0 | 271 | 1,489 | 7 |
| Egypt | 3,932 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 3,935 | 18 |
| Finland | 0 | 0 | 0 | 0 | 292 | 0 | 0 | 0 | 0 | 0 | 0 | 292 | 292 | 1 |
| France | 0 | 2 | 0 | 0 | 1,006 | 0 | 0 | 0 | 1,136 | 0 | 41 | 2,185 | 2,185 | 10 |
| Germany, DR (E) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 656 | 0 | 0 | 0 | 656 | 656 | 3 |
| Germany, FD (W) | 0 | 10 | 0 | 0 | 310 | 0 | 0 | 0 | 0 | 0 | 15 | 335 | 335 | 2 |
| Ghana | 0 | 0 | 133 | 0 | 0 | 0 | 0 | 0 | 298 | 0 | 0 | 431 | 431 | 2 |
| Greece | 0 | 0 | 0 | 0 | 2,187 | 0 | 0 | 134 | 1,320 | 0 | 0 | 3,641 | 3,641 | 17 |
| Hungary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 5 | (s) |
| India | 0 | 0 | 569 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 569 | 569 | 3 |
| Israel | 0 | 0 | 0 | 0 | 850 | 0 | 0 | 0 | 0 | 0 | 0 | 850 | 850 | 4 |
| Italy | 1,227 | 1 | 1,713 | 0 | 6,429 | 0 | 0 | 981 | 1,152 | 14 | 20 | 10,310 | 11,537 | 54 |
| Japan | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 65 | 70 | 70 | (s) |
| Korea, Republic | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | (s) |
| Liberia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 210 | 0 | 0 | 0 | 210 | 210 | 1 |
| Mauritania | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 245 | 0 | 0 | 245 | 245 | 1 |
| Mexico | 15,300 | 0 | 0 | 0 | 309 | 684 | 0 | 943 | 1,033 | 0 | 1,188 | 4,157 | 19,457 | 91 |
| Netherlands Antilles | 0 | 0 | 0 | 0 | 464 | 0 | 0 | 450 | 5,081 | 0 | 0 | 5,995 | 5,995 | 28 |
| Netherlands | 0 | 5 | 668 | 66 | 7,434 | 0 | 151 | 1,182 | 1,551 | 84 | 31 | 11,172 | 11,172 | 52 |
| Norway | 4,305 | 0 | 213 | 0 | 0 | 0 | 0 | 0 | 273 | 0 | 351 | 837 | 5,142 | 24 |
| Oman | 839 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 839 | 4 |
| Panama | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 10 | 10 | (s) |
| Peru | 380 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5,663 | 0 | 0 | 5,663 | 6,043 | 28 |
| Puerto Rico | 0 | 0 | 852 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,069 | 3,921 | 3,921 | 18 |
| Romania | 0 | 0 | 0 | 8,106 | 3,243 | 0 | 0 | 867 | 527 | 0 | 0 | 12,743 | 12,743 | 60 |
| Singapore | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 402 | 0 | 0 | 402 | 402 | 2 |
| South Africa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 210 | 0 | 32 | 242 | 242 | 1 |
| Spain | 0 | 2 | 565 | 142 | 5,687 | 901 | 0 | 0 | 1,556 | 0 | 1,046 | 9,900 | 9,900 | 46 |
| Sweden | 0 | 1 | 146 | 0 | 0 | 0 | 0 | 372 | 1,081 | 0 | 0 | 1,600 | 1,600 | 8 |
| Switzerland | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | (s) |
| Syria | 616 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 194 | 0 | 0 | 194 | 810 | 4 |
| Trinidad and Tobago | 3,448 | 0 | 0 | 0 | 138 | 300 | 115 | 434 | 4,469 | 0 | 0 | 5,456 | 8,904 | 42 |
| United Kingdom | 30,939 | 3 | 4 | 0 | 5,594 | 244 | 0 | 1,238 | 1,524 | 68 | 77 | 8,752 | 39,691 | 186 |
| U.S.S.R. | 0 | 0 | 0 | 0 | 395 | 0 | 0 | 3,270 | 27 | 8 | 0 | 3,700 | 3,700 | 17 |
| Virgin Islands | 0 | 0 | 10,747 | 2,314 | 6,528 | 2,665 | 894 | 8,084 | 15,915 | 0 | 0 | 47,147 | 47,147 | 221 |
| Yemen (Sanaa) | 970 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 970 | 5 |
| Zaire | 3,326 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,326 | 16 |

See footnotes at end of table.

## Table 19. Year-to-Date Imports of Crude Oil and Petroleum Products by Source and PAD District,[1] January - July 1988 (continued)

(Thousand Barrels)

| Source | Crude Oil [2] | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Products [3] | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **PAD District I (continued)** | | | | | | | | | | | | | |
| **Other (continued)** | | | | | | | | | | | | | | |
| Subtotal Other | 118,679 | 2,841 | 16,693 | 10,646 | 63,301 | 6,009 | 1,542 | 30,929 | 71,163 | 310 | 7,118 | 210,551 | 329,230 | 1,546 |
| **Total Imports** | **242,519** | **7,912** | **25,042** | **11,140** | **72,866** | **11,393** | **1,867** | **51,300** | **107,746** | **313** | **11,003** | **300,582** | **543,101** | **2,550** |
| | **PAD District II** | | | | | | | | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Algeria | 2,729 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,729 | 13 |
| Iraq | 6,918 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6,918 | 32 |
| Kuwait | 656 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 656 | 3 |
| Saudi Arabia | 32,013 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32,013 | 150 |
| United Arab Emirates | 177 | 0 | 0 | 0 | 0 | 592 | 0 | 0 | 0 | 0 | 0 | 592 | 769 | 4 |
| Subtotal Arab OPEC | 42,493 | 0 | 0 | 0 | 0 | 592 | 0 | 0 | 0 | 0 | 0 | 592 | 43,085 | 202 |
| **Other OPEC** | | | | | | | | | | | | | | |
| Ecuador | 779 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 779 | 4 |
| Indonesia | 659 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 659 | 3 |
| Nigeria | 17,475 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17,475 | 82 |
| Venezuela | 1,813 | 0 | 634 | 0 | 0 | 940 | 0 | 0 | 0 | 0 | 0 | 1,574 | 3,387 | 16 |
| Subtotal Other OPEC | 20,726 | 0 | 634 | 0 | 0 | 940 | 0 | 0 | 0 | 0 | 0 | 1,574 | 22,300 | 105 |
| **Other** | | | | | | | | | | | | | | |
| Canada | 113,139 | 18,147 | 0 | 21 | 700 | 597 | 0 | 1,060 | 617 | 383 | 556 | 22,081 | 135,220 | 635 |
| Colombia | 472 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 472 | 2 |
| Congo | 480 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 480 | 2 |
| France | 0 | 34 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 34 | 34 | (s) |
| Italy | 0 | 0 | 0 | 0 | 0 | 132 | 0 | 0 | 0 | 0 | 0 | 132 | 132 | 1 |
| Japan | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | (s) | (s) |
| Mexico | 11,973 | 0 | 0 | 0 | 0 | 1,199 | 0 | 0 | 0 | 0 | 0 | 1,199 | 13,172 | 62 |
| Norway | 447 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 447 | 2 |
| Peru | 1,129 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,129 | 5 |
| Puerto Rico | 0 | 0 | 103 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 103 | 103 | (s) |
| South Africa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 27 | 27 | 27 | (s) |
| Spain | 0 | 0 | 0 | 0 | 0 | 251 | 0 | 0 | 0 | 0 | 61 | 312 | 312 | 1 |
| Sweden | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | (s) |
| Trinidad and Tobago | 176 | 0 | 0 | 0 | 0 | 333 | 0 | 0 | 0 | 0 | 0 | 333 | 509 | 2 |
| United Kingdom | 5,011 | 4 | 368 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 372 | 5,383 | 25 |
| Zaire | 481 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 481 | 2 |
| Subtotal Other | 133,308 | 18,186 | 471 | 21 | 700 | 2,512 | 0 | 1,060 | 617 | 383 | 644 | 24,594 | 157,902 | 741 |
| **Total Imports** | **196,527** | **18,186** | **1,105** | **21** | **700** | **4,044** | **0** | **1,060** | **617** | **383** | **644** | **26,760** | **223,287** | **1,048** |
| | **PAD District III** | | | | | | | | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Algeria | 23,498 | 2,125 | 1,066 | 0 | 0 | 0 | 0 | 0 | 2,083 | 0 | 10,009 | 15,283 | 38,781 | 182 |
| Iraq | 48,214 | 0 | 407 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 407 | 48,621 | 228 |
| Kuwait | 9,635 | 0 | 2,637 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,637 | 12,272 | 58 |

See footnotes at end of table.

(Thousand Barrels)

| Source | Crude Oil[2] | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Products[3] | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | **PAD District III (continued)** | | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Neutral Zone[4] | 2,624 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,624 | 12 |
| Saudi Arabia | 132,057 | 2,718 | 20,130 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 660 | 23,508 | 155,565 | 730 |
| United Arab Emirates | 5,379 | 0 | 573 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 213 | 786 | 6,165 | 29 |
| Subtotal Arab OPEC | 221,407 | 4,843 | 24,813 | 0 | 0 | 0 | 0 | 0 | 2,083 | 0 | 10,882 | 42,621 | 264,028 | 1,240 |
| **Other OPEC** | | | | | | | | | | | | | | |
| Ecuador | 1,075 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,075 | 5 |
| Gabon | 2,439 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,439 | 11 |
| Indonesia | 12,276 | 0 | 922 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 922 | 13,198 | 62 |
| Iran | [5] 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | [5] 25 | [5] (s) |
| Nigeria | 31,174 | 0 | 603 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 603 | 31,777 | 149 |
| Venezuela | 72,418 | 700 | 8,237 | 236 | 1,571 | 0 | 0 | 2 | 520 | 0 | 133 | 11,399 | 83,817 | 394 |
| Subtotal Other OPEC | 119,407 | 700 | 9,762 | 236 | 1,571 | 0 | 0 | 2 | 520 | 0 | 133 | 12,924 | 132,331 | 621 |
| **Other** | | | | | | | | | | | | | | |
| Angola | 19,520 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19,520 | 92 |
| Argentina | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 209 | 17 | 226 | 226 | 1 |
| Australia | 5,384 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 51 | 51 | 5,435 | 26 |
| Bahama Islands | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 227 | 0 | 0 | 227 | 227 | 1 |
| Bahrain | 0 | 0 | 275 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 275 | 275 | 1 |
| Belgium | 0 | 0 | 1,687 | 208 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 1,907 | 1,907 | 9 |
| Benin | 313 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 313 | 1 |
| Bermuda | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 7 | (s) |
| Brazil | 0 | 461 | 0 | 0 | 747 | 0 | 0 | 0 | 0 | 1 | 0 | 1,209 | 1,209 | 6 |
| Cameroon | 2,343 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,343 | 11 |
| Canada | 3,510 | 1 | 852 | 0 | 0 | 0 | 0 | 600 | 701 | 274 | 243 | 2,671 | 6,181 | 29 |
| China, People's Republic | 9,535 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 110 | 110 | 9,645 | 45 |
| Colombia | 14,182 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14,182 | 67 |
| Congo | 5,288 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5,288 | 25 |
| Egypt | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 | 4 | (s) |
| France | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 123 | 123 | 123 | 1 |
| Germany, FD (W) | 0 | 0 | 359 | 0 | 0 | 0 | 0 | 0 | 252 | 4 | 34 | 649 | 649 | 3 |
| Ghana | 0 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 18 | (s) |
| Greece | 0 | 0 | 239 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 239 | 239 | 1 |
| Guatemala | 420 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 420 | 2 |
| India | 0 | 0 | 3,687 | 0 | 0 | 0 | 0 | 0 | 0 | 1,548 | 651 | 5,886 | 5,886 | 28 |
| Ireland | 0 | 0 | 174 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 174 | 174 | 1 |
| Israel | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 36 | 0 | 36 | 36 | (s) |
| Italy | 351 | 0 | 1,821 | 0 | 0 | 0 | 0 | 0 | 0 | 80 | 53 | 1,954 | 2,305 | 11 |
| Japan | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 127 | 145 | 145 | 1 |
| Malaysia | 424 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 424 | 2 |
| Mexico | 114,665 | 5,284 | 0 | 440 | 0 | 529 | 0 | 0 | 793 | 0 | 89 | 7,135 | 121,800 | 572 |
| Netherlands Antilles | 0 | 0 | 0 | 0 | 248 | 0 | 0 | 0 | 0 | 0 | 0 | 248 | 248 | 1 |
| Netherlands | 0 | 0 | 58 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 202 | 275 | 275 | 1 |
| Norway | 4,406 | 0 | 275 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 275 | 4,681 | 22 |
| Oman | 1,600 | 0 | 986 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 986 | 2,586 | 12 |
| Portugal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 | 20 | 48 | 48 | (s) |
| Puerto Rico | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 596 | 596 | 596 | 3 |
| South Africa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 3 | (s) |
| Spain | 0 | 38 | 1,243 | 0 | 1 | 86 | 0 | 0 | 1 | 0 | 0 | 1,370 | 1,370 | 6 |

See footnotes at end of table.

## Table 19. Year-to-Date Imports of Crude Oil and Petroleum Products by Source and PAD District,[1] January - July 1988 (continued)
(Thousand Barrels)

| Source | Crude Oil [2] | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Products [3] | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PAD District III (continued)** | | | | | | | | | | | | | | |
| **Other (continued)** | | | | | | | | | | | | | | |
| Sweden | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 250 | 250 | 250 | 1 |
| Trinidad and Tobago | 11,202 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11,202 | 53 |
| Tunisia | 0 | 0 | 220 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 220 | 220 | 1 |
| Turkey | 0 | 0 | 1,518 | 0 | 0 | 0 | 0 | 0 | 0 | 34 | 105 | 1,657 | 1,657 | 8 |
| United Kingdom | 28,824 | 0 | 1,165 | 0 | 0 | 0 | 0 | 0 | 615 | 0 | 66 | 1,846 | 30,670 | 144 |
| U.S.S.R. | 0 | 0 | 1,287 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,287 | 1,287 | 6 |
| Virgin Islands | 0 | 0 | 416 | 0 | 0 | 0 | 716 | 0 | 0 | 0 | 0 | 1,132 | 1,132 | 5 |
| Yemen (Sanaa) | 625 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 625 | 3 |
| Zaire | 2,564 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,564 | 12 |
| Subtotal Other | 225,156 | 5,784 | 16,287 | 648 | 996 | 615 | 716 | 600 | 2,589 | 2,247 | 2,756 | 33,238 | 258,394 | 1,213 |
| **Total Imports** | **565,970** | **11,327** | **50,862** | **884** | **2,567** | **615** | **716** | **602** | **5,192** | **2,247** | **13,771** | **88,784** | **654,754** | **3,074** |
| **PAD District IV** | | | | | | | | | | | | | | |
| **Other** | | | | | | | | | | | | | | |
| Canada | 12,978 | 2,705 | 0 | 0 | 352 | 0 | 0 | 493 | 0 | 1 | 177 | 3,728 | 16,706 | 78 |
| China, People's Republic | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | (s) |
| Subtotal Other | 12,978 | 2,706 | 0 | 0 | 352 | 0 | 0 | 493 | 0 | 1 | 177 | 3,729 | 16,707 | 78 |
| **Total Imports** | **12,978** | **2,706** | **0** | **0** | **352** | **0** | **0** | **493** | **0** | **1** | **177** | **3,729** | **16,707** | **78** |
| **PAD District V** | | | | | | | | | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Saudi Arabia | 0 | 0 | 0 | 0 | 1,126 | 266 | 0 | 0 | 0 | 0 | 0 | 1,392 | 1,392 | 7 |
| United Arab Emirates | 450 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 450 | 2 |
| Subtotal Arab OPEC | 450 | 0 | 0 | 0 | 1,126 | 266 | 0 | 0 | 0 | 0 | 0 | 1,392 | 1,842 | 9 |
| **Other OPEC** | | | | | | | | | | | | | | |
| Indonesia | 21,489 | 0 | 254 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 214 | 468 | 21,957 | 103 |
| Venezuela | 0 | 0 | 0 | 0 | 0 | 725 | 0 | 0 | 0 | 0 | 211 | 936 | 936 | 4 |
| Subtotal Other OPEC | 21,489 | 0 | 254 | 0 | 0 | 725 | 0 | 0 | 0 | 0 | 425 | 1,404 | 22,893 | 107 |
| **Other** | | | | | | | | | | | | | | |
| Australia | 4,317 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 460 | 0 | 0 | 460 | 4,777 | 22 |
| Brazil | 0 | 0 | 0 | 0 | 245 | 0 | 0 | 0 | 0 | 0 | 0 | 245 | 245 | 1 |
| Brunei | 338 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 338 | 2 |
| Canada | 3,941 | 1,751 | 0 | 0 | 973 | 352 | 0 | 564 | 116 | 57 | 255 | 4,068 | 8,009 | 38 |
| China, People's Republic | 1,307 | 0 | 0 | 307 | 823 | 0 | 0 | 0 | 0 | 0 | 0 | 1,130 | 2,437 | 11 |
| China, Taiwan | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 42 | 56 | 56 | (s) |
| Hong Kong | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | (s) | (s) |
| Italy | 0 | 0 | 0 | 0 | 0 | 418 | 0 | 0 | 0 | 0 | 0 | 418 | 418 | 2 |
| Japan | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 57 | 0 | 0 | 136 | 211 | 211 | 1 |
| Korea, Republic | 0 | 3 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 111 | 124 | 124 | 1 |
| Malaysia | 782 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 782 | 4 |
| Mexico | 0 | 0 | 0 | 0 | 205 | 201 | 0 | 0 | 4 | 0 | 184 | 594 | 594 | 3 |

See footnotes at end of table.

## Table 19. Year-to-Date Imports of Crude Oil and Petroleum Products by Source and PAD District,[1] January - July 1988 (continued)
(Thousand Barrels)

| Source | Crude Oil [2] | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Products [3] | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **PAD District V (continued)** | | | | | | | | | | | | | |
| **Other (continued)** | | | | | | | | | | | | | | |
| Netherlands Antilles | 0 | 0 | 0 | 0 | 269 | 0 | 0 | 0 | 0 | 0 | 0 | 269 | 269 | 1 |
| Netherlands | 0 | 6 | 0 | 0 | 708 | 0 | 0 | 0 | 0 | 0 | 0 | 714 | 714 | 3 |
| Philippines | 0 | 74 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 74 | 74 | (s) |
| Singapore | 0 | 0 | 601 | 0 | 0 | 25 | 0 | 0 | 1,630 | 0 | 0 | 2,256 | 2,256 | 11 |
| South Africa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | (s) |
| Switzerland | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | (s) | (s) |
| Subtotal Other | 10,685 | 1,866 | 601 | 307 | 3,223 | 1,006 | 0 | 621 | 2,210 | 57 | 730 | 10,620 | 21,305 | 100 |
| **Total Imports** | **32,624** | **1,866** | **855** | **307** | **4,349** | **1,997** | **0** | **621** | **2,210** | **57** | **1,155** | **13,416** | **46,040** | **216** |

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[1] Crude Oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

[2] Includes crude oil imported for storage in the Strategic Petroleum Reserve.

[3] Includes aviation gasoline, aviation gasoline blending components, waxes, asphalt, lubricants, pentanes plus, naphthas less than 400 degrees F endpoint, other oils equal to or greater than 400 degrees F endpoint, petroleum coke and miscellaneous products.

[4] Beginning in January 1988, imports of crude oil and petroleum products from the Neutral Zone are shown separately. Prior to January 1988, these data were included with imports from Saudi Arabia and Kuwait.

[5] A small amount of Iranian crude oil entered the United States (defined in this publication as the 50 States and the District of Columbia) in January 1988 from the Virgin Islands. This oil originated in Iran and was exported to the Virgin Islands prior to the signing of Executive Order 12613 on Oct. 29, 1987.

(s) = Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 20. Exports of Crude Oil and Petroleum Products by PAD District, July 1988
(Thousand Barrels)

| Commodity | Petroleum Administration for Defense Districts | | | | | | Daily Average |
|---|---|---|---|---|---|---|---|
| | I | II | III | IV | V | Total | |
| Crude Oil (including lease condensate) 1 | 0 | 48 | 0 | 0 | 5,859 | 5,907 | 191 |
| Natural Gas Liquids | 34 | 505 | 396 | 21 | 203 | 1,160 | 37 |
| Pentanes Plus | 0 | 63 | 0 | 0 | 0 | 63 | 2 |
| Liquefied Petroleum Gases | 34 | 442 | 396 | 21 | 203 | 1,097 | 35 |
| Ethane | 4 | 126 | (s) | 0 | (s) | 130 | 4 |
| Propane | 7 | 138 | 384 | 8 | 91 | 628 | 20 |
| Normal Butane | 23 | 116 | 12 | 13 | 112 | 276 | 9 |
| Isobutane | 0 | 63 | 0 | 0 | 0 | 63 | 2 |
| Finished Motor Gasoline | 4 | 84 | 272 | 0 | 6 | 365 | 12 |
| Naphtha-Type Jet Fuel | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Kerosene-Type Jet Fuel | 21 | 1 | 20 | (s) | 65 | 107 | 3 |
| Kerosene | 4 | 1 | 1 | 0 | (s) | 6 | (s) |
| Distillate Fuel Oil | 8 | 2 | 724 | 0 | 1,062 | 1,796 | 58 |
| Residual Fuel Oil | 3 | 0 | 2,483 | 0 | 3,903 | 6,390 | 206 |
| Naphtha < 400 Deg. for Petro. Feed. Use | 64 | 23 | 102 | 2 | 12 | 203 | 7 |
| Other Oils > 400 Deg. for Petro. Feed. Use | 0 | 34 | 155 | 0 | 134 | 323 | 10 |
| Special Naphthas | 83 | 2 | 122 | 0 | 76 | 283 | 9 |
| Lubricants | 178 | 36 | 363 | 1 | 175 | 753 | 24 |
| Waxes | 6 | 60 | 16 | (s) | 8 | 90 | 3 |
| Petroleum Coke | 521 | 230 | 4,241 | (s) | 3,273 | 8,264 | 267 |
| Asphalt | (s) | 2 | 1 | 1 | 39 | 43 | 1 |
| Miscellaneous Products | 45 | 2 | 2 | (s) | 5 | 54 | 2 |
| Total Product Exports | 972 | 980 | 8,899 | 25 | 8,963 | 19,839 | 640 |
| **Total Exports** | **972** | **1,028** | **8,899** | **25** | **14,822** | **25,746** | **831** |

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[1] Crude oil exports are restricted to: 1) crude oil derived from fields under the State waters of Alaska's Cook Inlet; 2) certain domestically produced crude oil destined for Canada; and 3) shipments to U.S. territories.

(s) = Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 21. Year-to-Date Exports of Crude Oil and Petroleum Products by PAD District, January - July
(Thousand Barrels)

| Commodity | Petroleum Administration for Defense Districts | | | | | | Daily Average |
|---|---|---|---|---|---|---|---|
| | I | II | III | IV | V | Total | |
| Crude Oil (including lease condensate) 1 | 0 | 2,503 | 0 | 0 | 33,168 | 35,670 | 167 |
| Natural Gas Liquids | 287 | 3,601 | 3,393 | 264 | 1,397 | 8,943 | 42 |
| Pentanes Plus | 0 | 431 | 0 | 0 | 0 | 431 | 2 |
| Liquefied Petroleum Gases | 287 | 3,171 | 3,393 | 264 | 1,397 | 8,512 | 40 |
| Ethane | 5 | 862 | 1 | 0 | (s) | 869 | 4 |
| Propane | 130 | 960 | 3,214 | 106 | 618 | 5,028 | 24 |
| Normal Butane | 151 | 918 | 178 | 159 | 780 | 2,185 | 10 |
| Isobutane | 0 | 431 | 0 | 0 | 0 | 431 | 2 |
| Finished Motor Gasoline | 156 | 634 | 3,197 | 1 | 882 | 4,870 | 23 |
| Naphtha-Type Jet Fuel | 8 | 0 | 12 | 1 | 80 | 101 | (s) |
| Kerosene-Type Jet Fuel | 254 | 3 | 4,656 | (s) | 1,291 | 6,205 | 29 |
| Kerosene | 62 | 125 | 13 | 1 | 2 | 202 | 1 |
| Distillate Fuel Oil | 248 | 185 | 7,301 | (s) | 7,837 | 15,572 | 73 |
| Residual Fuel Oil | 20 | 0 | 14,524 | 0 | 30,223 | 44,767 | 210 |
| Naphtha < 400 Deg. for Petro. Feed. Use | 332 | 158 | 390 | 8 | 100 | 989 | 5 |
| Other Oils > 400 Deg. for Petro. Feed. Use | 16 | 228 | 2,169 | 0 | 1,169 | 3,582 | 17 |
| Special Naphthas | 164 | 43 | 609 | 2 | 359 | 1,176 | 6 |
| Lubricants | 1,524 | 318 | 2,438 | 24 | 1,040 | 5,344 | 25 |
| Waxes | 36 | 100 | 147 | (s) | 57 | 340 | 2 |
| Petroleum Coke | 1,685 | 660 | 28,970 | 1 | 18,843 | 50,159 | 235 |
| Asphalt | 6 | 60 | 9 | 5 | 50 | 130 | 1 |
| Miscellaneous Products | 224 | 17 | 113 | 1 | 34 | 389 | 2 |
| Total Product Exports | 5,021 | 6,134 | 67,941 | 307 | 63,364 | 142,767 | 670 |
| **Total Exports** | **5,021** | **8,637** | **67,941** | **307** | **96,531** | **178,438** | **838** |

[1] Crude oil exports are restricted to: 1) crude oil derived from fields under the State waters of Alaska's Cook Inlet; 2) certain domestically produced crude oil destined for Canada; and 3) shipments to U.S. territories.

(s) = Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 22. Exports of Crude Oil and Petroleum Products by Destination, July 1988

(Thousand Barrels)

| Destination | Crude Oil 1 | LPG | Finished Motor Gasoline | Jet Fuel | Dist. Fuel Oil | Residual Fuel Oil | Special Naphthas | Lubricants | Waxes | Petroleum Coke | Asphalt | Other2 | Total | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Argentina | 0 | (s) | 0 | 0 | 0 | 256 | 1 | 9 | (s) | 0 | 0 | (s) | 266 | 9 |
| Australia | 0 | 1 | 0 | 0 | 0 | 27 | 13 | 7 | (s) | 246 | 0 | 1 | 295 | 10 |
| Bahamas | 0 | 11 | 30 | 18 | 192 | 236 | 0 | 1 | 0 | 0 | 0 | (s) | 489 | 16 |
| Bahrain | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 64 | 0 | 0 | 64 | 2 |
| Belgium & Luxembourg | 0 | (s) | 0 | 0 | 0 | 0 | 4 | 22 | 1 | 1,366 | (s) | (s) | 1,394 | 45 |
| Brazil | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 40 | (s) | 0 | 0 | (s) | 43 | 1 |
| Cameroon | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Canada | 48 | 479 | 93 | 87 | 294 | 442 | 6 | 113 | 63 | 374 | 40 | 146 | 2,183 | 70 |
| Chile | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 18 | (s) | (s) | 0 | 1 | 19 | 1 |
| China, Taiwan | 334 | 0 | 0 | 0 | 5 | 795 | 0 | 48 | (s) | 1 | (s) | 15 | 1,199 | 39 |
| Colombia | 0 | 0 | 126 | 0 | 0 | 0 | 3 | 1 | (s) | (s) | 0 | 1 | 131 | 4 |
| Costa Rica | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 25 | (s) | 0 | 0 | 3 | 28 | 1 |
| Denmark | 0 | (s) | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 120 | 0 | (s) | 121 | 4 |
| Dominican Republic | 0 | 0 | 4 | 0 | 0 | 0 | 2 | 4 | 0 | 0 | 0 | 1 | 11 | (s) |
| Ecuador | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 1 | 0 | 0 | 0 | 1 | 2 | (s) |
| Egypt | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 0 | 0 | 0 | (s) | (s) |
| El Salvador | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 4 | (s) |
| Finland | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 174 | 0 | (s) | 174 | 6 |
| France | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 2 | 55 | (s) | 1 | 63 | 2 |
| French Pacific Isl | 0 | (s) | 0 | 0 | 0 | 498 | (s) | 1 | 0 | 0 | 0 | 0 | 499 | 16 |
| Ghana | 0 | 0 | 0 | 0 | 0 | 0 | (s) | (s) | 0 | 52 | 0 | 1 | 54 | 2 |
| Greece | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 66 | 0 | (s) | 68 | 2 |
| Guatemala | 0 | 105 | 20 | 0 | 19 | 0 | 0 | 8 | (s) | 0 | 0 | 1 | 153 | 5 |
| Guinea | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 0 | 0 | 0 | (s) | (s) |
| Honduras | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 3 | (s) | 0 | 0 | 1 | 4 | (s) |
| Hong Kong | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 5 | (s) | 0 | 0 | (s) | 6 | (s) |
| India | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 0 | 1 | 1 | (s) |
| Indonesia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | (s) | 0 | 0 | (s) | 2 | (s) |
| Israel | 0 | 0 | 0 | 0 | 0 | 0 | 11 | (s) | 0 | 0 | 0 | (s) | 11 | (s) |
| Italy | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | (s) | 455 | 0 | 8 | 470 | 15 |
| Jamaica | 0 | 55 | 45 | 0 | 83 | 430 | (s) | (s) | (s) | 0 | 0 | 1 | 614 | 20 |
| Japan | 0 | 15 | 29 | 0 | 420 | 168 | 111 | 101 | 4 | 2,513 | 0 | 33 | 3,395 | 110 |
| Jordan | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | (s) |
| Korea, Republic | 0 | 7 | 1 | 0 | 174 | 521 | 31 | 17 | 1 | 55 | 0 | 43 | 850 | 27 |
| Kuwait | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 1 | 0 | 0 | 0 | (s) | 1 | (s) |
| Lebanon | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | (s) | 2 | (s) |
| Liberia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 0 | 0 | (s) | (s) | (s) |
| Malaysia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | (s) | 0 | 0 | 1 | 4 | (s) |
| Mexico | 0 | 377 | 1 | 0 | 0 | 1,540 | 11 | 87 | 15 | 94 | (s) | 27 | 2,152 | 69 |
| Netherlands | 0 | 2 | 0 | 0 | 0 | 0 | 76 | 17 | 1 | 1,509 | 0 | 12 | 1,618 | 52 |
| Netherlands Antilles | 0 | 0 | 9 | 2 | 0 | 673 | 1 | 2 | 0 | 0 | 0 | (s) | 687 | 22 |
| New Zealand | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 125 | 0 | 1 | 127 | 4 |
| Nigeria | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 0 | 0 | 0 | (s) | (s) |
| Norway | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 71 | (s) | (s) | 71 | 2 |
| Pacific Trust Terr. | 0 | (s) | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 0 | 0 | 0 | (s) | (s) |
| Panama | 0 | 0 | 0 | 0 | 0 | 209 | 1 | 67 | 0 | 0 | 0 | (s) | 277 | 9 |
| Peru | 0 | 0 | 0 | 0 | 220 | 0 | (s) | 2 | 0 | 0 | 0 | (s) | 222 | 7 |
| Philippines | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | (s) | 0 | (s) | 1 | 5 | (s) |
| Puerto Rico | 390 | 17 | 4 | 0 | 105 | 3 | 3 | 28 | 1 | 0 | 0 | 13 | 563 | 18 |
| Rep. of South Africa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | (s) | 0 | 0 | 1 | 1 | (s) |
| Saudi Arabia | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | (s) | 0 | 2 | 21 | 1 |
| Singapore | 0 | 2 | 0 | 0 | 148 | 412 | 2 | 5 | (s) | 1 | (s) | 25 | 594 | 19 |

See footnotes at end of table.

## Table 22. Exports of Crude Oil and Petroleum Products by Destination, July 1988 (Continued)
(Thousand Barrels)

| Destination | Crude Oil [1] | LPG | Finished Motor Gasoline | Jet Fuel | Dist. Fuel Oil | Residual Fuel Oil | Special Naphthas | Lubricants | Waxes | Petroleum Coke | Asphalt | Other[2] | Total | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Spain | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | (s) | 635 | 0 | 83 | 720 | 23 |
| Surinam | 0 | 0 | 0 | 0 | 0 | 0 | (s) | (s) | 0 | 0 | 0 | (s) | (s) | (s) |
| Sweden | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | (s) | 19 | (s) | 1 | 21 | 1 |
| Switzerland | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 1 | 0 | 0 | (s) | 1 | 2 | (s) |
| Thailand | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 101 | 103 | 3 |
| Trinidad and Tobago | 0 | 3 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 0 | 0 | 1 | 3 | (s) |
| Turkey | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 0 | 0 | 0 | (s) | (s) |
| United Arab Emirates | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 3 | 0 | 0 | (s) | (s) | 3 | (s) |
| United Kingdom | 0 | 1 | 0 | 0 | 0 | 0 | (s) | 13 | (s) | 2 | 1 | 105 | 122 | 4 |
| U.S.S.R. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 43 | 0 | 0 | 0 | 9 | 52 | 2 |
| Uruguay | 0 | 0 | 0 | 0 | 0 | 182 | 0 | 2 | 0 | 0 | 0 | (s) | 184 | 6 |
| Venezuela | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | (s) | 88 | (s) | 2 | 93 | 3 |
| Virgin Islands | 5,135 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 0 | 0 | 0 | 5,135 | 166 |
| West Germany | 0 | 1 | (s) | 0 | (s) | 0 | (s) | 5 | (s) | 65 | (s) | (s) | 72 | 2 |
| Yugoslavia | 0 | 0 | 0 | 0 | 0 | 0 | (s) | (s) | 0 | 0 | 0 | (s) | 1 | (s) |
| Other | 0 | 4 | 3 | 0 | 138 | 0 | 2 | 17 | (s) | 113 | 1 | 2 | 279 | 9 |
| **Total** | **5,907** | **1,097** | **365** | **107** | **1,796** | **6,390** | **283** | **753** | **90** | **8,264** | **43** | **649** | **25,746** | **831** |

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[1] Crude oil exports are restricted to: 1) crude oil derived from fields under the State waters of Alaska's Cook Inlet; 2) certain domestically produced crude oil destined for Canada; and 3) shipments to U.S. territories.

[2] Includes pentanes plus, kerosene, naphtha less than 400 degrees F endpoint, other oils equal to or greater than 400 degrees F endpoint and miscellaneous products.

(s) – Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

### Table 23. Year-to-Date Exports of Crude Oil and Petroleum Products by Destination, January - July 1988
(Thousand Barrels)

| Destination | Crude Oil [1] | LPG | Finished Motor Gasoline | Jet Fuel | Dist. Fuel Oil | Residual Fuel Oil | Special Naphthas | Lubricants | Waxes | Petroleum Coke | Asphalt | Other[2] | Total | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Argentina | 0 | 19 | 0 | 0 | 0 | 256 | 9 | 28 | 1 | 3 | (s) | 116 | 433 | 2 |
| Australia | 0 | 5 | 0 | 0 | 223 | 2,033 | 42 | 56 | 3 | 1,846 | (s) | 28 | 4,237 | 20 |
| Bahamas | 0 | 72 | 405 | 245 | 1,303 | 3,025 | 0 | 24 | (s) | 0 | (s) | 1 | 5,075 | 24 |
| Bahrain | 0 | 1 | 0 | 0 | (s) | 0 | (s) | (s) | 0 | 252 | 0 | 2 | 255 | 1 |
| Belgium & Luxembourg | 0 | 20 | 0 | 0 | 0 | 0 | 61 | 157 | 5 | 4,978 | (s) | 5 | 5,226 | 25 |
| Brazil | 0 | 52 | 42 | 0 | 0 | 0 | 25 | 90 | (s) | 182 | (s) | 3 | 395 | 2 |
| Cameroon | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 75 | 0 | 0 | 75 | (s) |
| Canada | 2,513 | 3,566 | 1,058 | 1,614 | 2,160 | 2,355 | 88 | 889 | 118 | 2,548 | 105 | 1,118 | 18,130 | 85 |
| Chile | 0 | 3 | 0 | 0 | 0 | 0 | 8 | 117 | 1 | (s) | (s) | 7 | 135 | 1 |
| China, Taiwan | 951 | 10 | 1 | 0 | 587 | 5,899 | 1 | 315 | 6 | 172 | (s) | 61 | 8,003 | 38 |
| Colombia | 0 | (s) | 126 | 0 | 0 | 0 | 8 | 44 | (s) | 1 | 0 | 14 | 193 | 1 |
| Costa Rica | 0 | (s) | 10 | 0 | (s) | 0 | 15 | 70 | (s) | 20 | (s) | 18 | 134 | 1 |
| Denmark | 0 | 1 | 0 | 0 | 0 | 0 | (s) | 2 | (s) | 657 | 1 | 9 | 670 | 3 |
| Dominican Republic | 0 | 28 | 4 | 0 | 56 | 0 | 3 | 21 | (s) | (s) | 0 | 5 | 117 | 1 |
| Ecuador | 0 | (s) | 50 | 10 | (s) | 0 | 3 | 68 | 1 | 0 | (s) | 6 | 139 | 1 |
| Egypt | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 135 | (s) | 1 | 143 | 1 |
| El Salvador | 0 | 0 | 8 | 0 | 0 | 0 | 3 | 20 | 0 | (s) | 0 | 3 | 34 | (s) |
| Finland | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 174 | 0 | (s) | 185 | 1 |
| France | 0 | 3 | (s) | 0 | 0 | 107 | 1 | 21 | 24 | 1,642 | (s) | 674 | 2,471 | 12 |
| French Pacific Isl | 0 | 1 | 0 | 0 | 392 | 920 | (s) | 3 | 0 | 0 | 0 | 0 | 1,315 | 6 |
| Ghana | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 1 | 0 | 225 | (s) | 1 | 228 | 1 |
| Greece | 0 | 6 | 0 | 0 | 0 | 0 | 2 | 6 | (s) | 681 | 0 | (s) | 696 | 3 |
| Guatemala | 0 | 585 | 555 | 37 | 997 | 0 | 9 | 71 | (s) | (s) | (s) | 10 | 2,263 | 11 |
| Guinea | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | (s) | 5 | (s) |
| Honduras | 0 | 44 | 0 | 0 | 70 | 0 | 4 | 27 | 3 | 0 | 0 | 7 | 154 | 1 |
| Hong Kong | 0 | 4 | 0 | 0 | 0 | 0 | (s) | 18 | 1 | 0 | (s) | 2 | 25 | (s) |
| India | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 57 | 1 | (s) | (s) | 29 | 90 | (s) |
| Indonesia | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 23 | (s) | 97 | (s) | 1 | 125 | 1 |
| Iran | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Israel | 0 | 1 | 39 | 448 | 0 | 0 | 11 | 20 | (s) | 134 | 0 | 6 | 659 | 3 |
| Italy | 0 | 111 | 3 | 0 | 0 | 0 | 26 | 34 | 3 | 6,192 | (s) | 573 | 6,941 | 33 |
| Ivory Coast | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | (s) | 0 | (s) | (s) | 25 | (s) |
| Jamaica | 0 | 153 | 45 | 0 | 269 | 1,667 | 1 | 20 | 1 | (s) | 0 | 6 | 2,163 | 10 |
| Japan | 0 | 21 | 2,039 | 3,228 | 5,734 | 4,433 | 486 | 344 | 22 | 12,316 | (s) | 341 | 28,965 | 136 |
| Jordan | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 9 | (s) |
| Korea, Republic | 0 | 50 | 3 | 0 | 242 | 3,016 | 44 | 262 | 3 | 548 | (s) | 610 | 4,777 | 22 |
| Kuwait | 0 | 1 | 0 | 0 | 0 | 0 | (s) | 7 | 0 | 0 | 0 | 1 | 9 | (s) |
| Lebanon | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 5 | (s) | 0 | 0 | (s) | 5 | (s) |
| Liberia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 0 | (s) | (s) | (s) | (s) |
| Malaysia | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 10 | 3 | 0 | (s) | 6 | 19 | (s) |
| Mexico | 0 | 3,258 | 4 | 17 | 1 | 8,398 | 36 | 640 | 94 | 548 | 1 | 105 | 13,101 | 62 |
| Netherlands | 0 | 38 | 19 | 0 | 0 | 0 | 92 | 71 | 5 | 5,869 | 1 | 327 | 6,420 | 30 |
| Netherlands Antilles | 0 | (s) | 9 | 2 | 65 | 3,612 | 1 | 12 | 0 | 0 | 0 | 3 | 3,705 | 17 |
| New Zealand | 0 | (s) | 0 | 0 | 0 | 0 | 6 | 9 | (s) | 396 | 1 | 6 | 419 | 2 |
| Nigeria | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 90 | 1 | 0 | (s) | (s) | 91 | (s) |
| Norway | 0 | 5 | 0 | 0 | (s) | 0 | 0 | 4 | (s) | 763 | (s) | 1 | 773 | 4 |
| Pacific Trust Terr. | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | (s) | 3 | (s) |
| Panama | 0 | 20 | 203 | 0 | 756 | 1,033 | 9 | 221 | (s) | 0 | (s) | 7 | 2,250 | 11 |
| Peru | 0 | 22 | 25 | 687 | 1,441 | 0 | 1 | 40 | (s) | (s) | (s) | 4 | 2,220 | 10 |
| Philippines | 0 | (s) | 0 | 0 | 0 | 0 | 8 | 40 | 1 | 0 | (s) | 8 | 57 | (s) |
| Puerto Rico | 3,313 | 74 | 8 | 0 | 308 | 87 | 10 | 236 | 8 | 11 | (s) | 72 | 4,127 | 19 |
| Rep. of South Africa | 0 | 1 | 0 | 0 | 0 | 0 | (s) | 5 | 1 | 259 | (s) | 14 | 280 | 1 |
| Saudi Arabia | 0 | 77 | 0 | 0 | 0 | 0 | (s) | 47 | (s) | 2 | (s) | 21 | 147 | 1 |

See footnotes at end of table.

(Thousand Barrels)

| Destination | Crude Oil 1 | LPG | Finished Motor Gasoline | Jet Fuel | Dist. Fuel Oil | Residual Fuel Oil | Special Naphthas | Lubricants | Waxes | Petroleum Coke | Asphalt | Other2 | Total | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Singapore | 0 | 4 | 0 | 0 | 326 | 4,224 | 10 | 33 | (s) | 2 | (s) | 152 | 4,751 | 22 |
| Spain | 0 | (s) | 0 | 0 | 202 | 2,550 | (s) | 24 | 19 | 4,549 | (s) | 441 | 7,787 | 37 |
| Surinam | 0 | 53 | 0 | 0 | 0 | 0 | (s) | 7 | 0 | 0 | 0 | (s) | 60 | (s) |
| Sweden | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 8 | 1 | 307 | 1 | 2 | 320 | 2 |
| Switzerland | 0 | (s) | 0 | 0 | 0 | 0 | 1 | 4 | (s) | 0 | (s) | 2 | 8 | (s) |
| Thailand | 0 | 1 | 0 | 0 | 0 | 0 | 5 | 21 | 1 | 0 | (s) | 294 | 323 | 2 |
| Trinidad and Tobago | 0 | 7 | 0 | 0 | 80 | 0 | 108 | 2 | (s) | 0 | 0 | 3 | 199 | 1 |
| Turkey | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 26 | (s) | 1,042 | 0 | 2 | 1,070 | 5 |
| United Arab Emirates | 0 | (s) | 0 | 0 | 0 | 5 | (s) | 55 | 0 | 132 | (s) | 8 | 200 | 1 |
| United Kingdom | 0 | 5 | 54 | 0 | 1 | 204 | 1 | 37 | 3 | 1,062 | 5 | 242 | 1,617 | 8 |
| U.S.S.R. | 0 | 0 | 0 | 0 | 0 | 25 | 0 | 524 | 0 | 287 | 0 | 59 | 896 | 4 |
| Uruguay | 0 | (s) | 0 | 0 | 0 | 182 | 0 | 6 | (s) | 0 | 0 | 1 | 189 | 1 |
| Venezuela | 0 | 11 | 0 | 5 | (s) | 0 | 8 | 21 | 2 | 730 | (s) | 21 | 797 | 4 |
| Virgin Islands | 28,893 | 4 | 7 | 0 | 0 | 0 | 0 | 17 | 0 | 0 | 0 | 7 | 28,927 | 136 |
| West Germany | 0 | 14 | 2 | 0 | (s) | 0 | 16 | 134 | 6 | 385 | 7 | 48 | 613 | 3 |
| Yugoslavia | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 1 | 0 | 263 | 1 | 2 | 266 | 1 |
| Other | 0 | 157 | 153 | 13 | 359 | 735 | 6 | 123 | 1 | 672 | 2 | 73 | 2,294 | 11 |
| **Total** | **35,670** | **8,512** | **4,870** | **6,306** | **15,572** | **44,767** | **1,176** | **5,344** | **340** | **50,159** | **130** | **5,591** | **178,438** | **838** |

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[1] Crude oil exports are restricted to: 1) crude oil derived from fields under the State waters of Alaska's Cook Inlet; 2) certain domestically produced crude oil destined for Canada; and 3) shipments to U.S. territories.

[2] Includes pentanes plus, kerosene, naphtha less than 400 degrees F endpoint, other oils equal to or greater than 400 degrees F endpoint and miscellaneous products.

(s) – Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 24. Stocks of Crude Oil and Petroleum Products by PAD District, July 31, 1988
(Thousand Barrels)

| Commodity | PAD District I | | | PAD District II | | | | PAD District III | | | | | | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | East Coast | Appala-chian No.1 | Total | Ind., Ill., Ky. * | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast | |
| **Crude Oil (incl. lease condensate)** | | | | | | | | | | | | | | | | |
| Refinery | -- | -- | 13,844 | -- | -- | -- | 13,484 | -- | -- | -- | -- | -- | 50,624 | 2,074 | 23,281 | 103,307 |
| Tank Farms and Pipelines | -- | -- | 1,255 | -- | -- | -- | 63,558 | -- | -- | -- | -- | -- | 101,763 | 9,701 | 29,266 | 205,543 |
| Leases | -- | -- | 37 | -- | -- | -- | 1,443 | -- | -- | -- | -- | -- | 16,650 | 1,173 | 1,786 | 21,089 |
| Strategic Petroleum Reserve[1] | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | -- | -- | 551,344 | 0 | 0 | 551,344 |
| Alaskan In-Transit | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | -- | -- | 0 | 0 | 19,391 | 19,391 |
| Total | -- | -- | 15,136 | -- | -- | -- | 78,485 | -- | -- | -- | -- | -- | 720,381 | 12,948 | 73,724 | 900,674 |
| **Total Stocks, All Oils (excl. Crude Oil)** | | | | | | | | | | | | | | | | |
| Refinery | 42,322 | 3,178 | 45,500 | 39,518 | 8,345 | 15,654 | 63,517 | 11,591 | 80,275 | 48,885 | 5,726 | 1,160 | 147,637 | 11,541 | 66,846 | 335,041 |
| Bulk Terminal | -- | -- | 94,388 | -- | -- | -- | 68,922 | -- | -- | -- | -- | -- | 75,002 | 2,866 | 24,289 | 265,467 |
| Pipeline | -- | -- | 27,739 | -- | -- | -- | 35,536 | -- | -- | -- | -- | -- | 40,254 | 2,326 | 5,182 | 111,037 |
| Natural Gas Processing Plant | 155 | 52 | 207 | 295 | 48 | 2,894 | 3,237 | 1,263 | 6,739 | 2,376 | 188 | 146 | 10,712 | 187 | 123 | 14,466 |
| Total | -- | -- | 167,834 | -- | -- | -- | 171,212 | -- | -- | -- | -- | -- | 273,605 | 16,920 | 96,440 | 726,011 |
| **Pentanes Plus** | | | | | | | | | | | | | | | | |
| Refinery | 19 | 0 | 19 | 224 | 16 | 184 | 424 | 404 | 330 | 240 | 13 | 16 | 1,003 | 0 | 33 | 1,479 |
| Bulk Terminal | -- | -- | 12 | -- | -- | -- | 1,711 | -- | -- | -- | -- | -- | 2,351 | 0 | 1 | 4,075 |
| Pipeline | -- | -- | 0 | -- | -- | -- | 899 | -- | -- | -- | -- | -- | 993 | 82 | 0 | 1,974 |
| Natural Gas Processing Plant | 5 | 12 | 17 | 18 | 16 | 407 | 441 | 389 | 646 | 546 | 62 | 45 | 1,688 | 62 | 25 | 2,233 |
| Total | -- | -- | 48 | -- | -- | -- | 3,475 | -- | -- | -- | -- | -- | 6,035 | 144 | 59 | 9,761 |
| **Liquefied Petroleum Gases** | | | | | | | | | | | | | | | | |
| Refinery | 1,161 | 12 | 1,173 | 2,508 | 176 | 511 | 3,195 | 2,693 | 2,481 | 3,885 | 23 | 33 | 9,115 | 389 | 796 | 14,668 |
| Bulk Terminal | -- | -- | 1,747 | -- | -- | -- | 20,174 | -- | -- | -- | -- | -- | 46,167 | 62 | 1,969 | 70,119 |
| Pipeline | -- | -- | 1,691 | -- | -- | -- | 6,836 | -- | -- | -- | -- | -- | 5,966 | 428 | 0 | 14,921 |
| Natural Gas Processing Plant | 150 | 40 | 190 | 277 | 32 | 2,487 | 2,796 | 852 | 6,086 | 1,827 | 124 | 101 | 8,990 | 124 | 98 | 12,198 |
| Total | -- | -- | 4,801 | -- | -- | -- | 33,001 | -- | -- | -- | -- | -- | 70,238 | 1,003 | 2,863 | 111,906 |
| **Ethane** | | | | | | | | | | | | | | | | |
| Refinery | 17 | 0 | 17 | 1 | 0 | 0 | 1 | 114 | 242 | 0 | 0 | 0 | 356 | 0 | 0 | 374 |
| Bulk Terminal | -- | -- | 1 | -- | -- | -- | 2,039 | -- | -- | -- | -- | -- | 9,902 | 0 | 0 | 11,942 |
| Pipeline | -- | -- | 0 | -- | -- | -- | 1,501 | -- | -- | -- | -- | -- | 2,298 | 122 | 0 | 3,921 |
| Natural Gas Processing Plant | 0 | 0 | 0 | 17 | 0 | 416 | 433 | 65 | 1,789 | 144 | 9 | 10 | 2,017 | 2 | 0 | 2,452 |
| Total | -- | -- | 18 | -- | -- | -- | 3,974 | -- | -- | -- | -- | -- | 14,573 | 124 | 0 | 18,689 |

See footnotes at end of table.

(Thousand Barrels)

| Commodity | PAD District I | | | PAD District II | | | | PAD District III | | | | | | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | East Coast | Appalachian No.1 | Total | Ind., Ill., Ky. * | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast | |
| **Propane** | | | | | | | | | | | | | | | | |
| Refinery | 825 | 6 | 831 | 1,560 | 43 | 172 | 1,775 | 1,654 | 1,345 | 1,430 | 8 | 4 | 4,441 | 148 | 115 | 7,310 |
| Bulk Terminal | -- | -- | 1,195 | -- | -- | -- | 13,132 | -- | -- | -- | -- | -- | 23,801 | 62 | 377 | 38,567 |
| Pipeline | -- | -- | 1,574 | -- | -- | -- | 3,655 | -- | -- | -- | -- | -- | 2,313 | 170 | 0 | 7,712 |
| Natural Gas Processing Plant | 98 | 29 | 127 | 170 | 19 | 1,148 | 1,337 | 501 | 1,921 | 153 | 56 | 61 | 2,692 | 75 | 84 | 4,315 |
| Total | -- | -- | 3,727 | -- | -- | -- | 19,899 | -- | -- | -- | -- | -- | 33,247 | 455 | 576 | 57,904 |
| **Normal Butane** | | | | | | | | | | | | | | | | |
| Refinery | 262 | 6 | 268 | 651 | 71 | 244 | 966 | 747 | 435 | 1,877 | 5 | 19 | 3,083 | 169 | 568 | 5,054 |
| Bulk Terminal | -- | -- | 550 | -- | -- | -- | 3,983 | -- | -- | -- | -- | -- | 8,398 | 0 | 1,478 | 14,409 |
| Pipeline | -- | -- | 117 | -- | -- | -- | 1,027 | -- | -- | -- | -- | -- | 803 | 88 | 0 | 2,035 |
| Natural Gas Processing Plant | 51 | 8 | 59 | 73 | 13 | 737 | 823 | 235 | 1,573 | 547 | 44 | 22 | 2,421 | 42 | 9 | 3,354 |
| Total | -- | -- | 994 | -- | -- | -- | 6,799 | -- | -- | -- | -- | -- | 14,705 | 299 | 2,055 | 24,852 |
| **Isobutane** | | | | | | | | | | | | | | | | |
| Refinery | 57 | 0 | 57 | 296 | 62 | 95 | 453 | 178 | 459 | 578 | 10 | 10 | 1,235 | 72 | 113 | 1,930 |
| Bulk Terminal | -- | -- | 1 | -- | -- | -- | 1,020 | -- | -- | -- | -- | -- | 4,066 | 0 | 114 | 5,201 |
| Pipeline | -- | -- | 0 | -- | -- | -- | 653 | -- | -- | -- | -- | -- | 552 | 48 | 0 | 1,253 |
| Natural Gas Processing Plant | 1 | 3 | 4 | 17 | 0 | 186 | 203 | 51 | 803 | 983 | 15 | 8 | 1,860 | 5 | 5 | 2,077 |
| Total | -- | -- | 62 | -- | -- | -- | 2,329 | -- | -- | -- | -- | -- | 7,713 | 125 | 232 | 10,461 |
| **Other Hydrocarbons and Alcohol** | | | | | | | | | | | | | | | | |
| Refinery | 11 | 0 | 11 | 123 | 2 | 45 | 170 | 0 | 72 | 64 | 0 | 2 | 138 | 18 | 7 | 344 |
| Total | -- | -- | 11 | -- | -- | -- | 170 | -- | -- | -- | -- | -- | 138 | 18 | 7 | 344 |
| **Unfinished Oils** | | | | | | | | | | | | | | | | |
| Refinery | | | | | | | | | | | | | | | | |
| Naphthas and Lighter | 3,859 | 205 | 4,064 | 3,401 | 103 | 1,372 | 4,876 | 847 | 7,984 | 4,326 | 118 | 60 | 13,335 | 561 | 4,050 | 26,886 |
| Kerosene and Light Gas Oils | 2,147 | 220 | 2,367 | 1,530 | 121 | 192 | 1,843 | 589 | 6,725 | 2,247 | 88 | 3 | 9,652 | 430 | 3,808 | 18,100 |
| Heavy Gas Oils | 5,766 | 283 | 6,049 | 3,008 | 351 | 1,854 | 5,213 | 656 | 10,842 | 7,418 | 401 | 175 | 19,492 | 755 | 15,547 | 47,056 |
| Residuum | 1,016 | 147 | 1,163 | 3,223 | 6 | 1,185 | 4,414 | 532 | 5,137 | 4,572 | 62 | 0 | 10,303 | 367 | 5,311 | 21,558 |
| Total | 12,788 | 855 | 13,643 | 11,162 | 581 | 4,603 | 16,346 | 2,624 | 30,688 | 18,563 | 669 | 238 | 52,782 | 2,113 | 28,716 | 113,600 |

See footnotes at end of table.

## Table 24. Stocks of Crude Oil and Petroleum Products by PAD District, July 31, 1988 (continued)
(Thousand Barrels)

| Commodity | PAD District I |  |  | PAD District II |  |  |  | PAD District III |  |  |  |  |  | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | East Coast | Appalachian No.1 | Total | Ind., Ill., Ky. * | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast |  |
| **Motor Gasoline Blending Components** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 4,805 | 71 | 4,876 | 4,483 | 476 | 1,532 | 6,491 | 1,265 | 7,372 | 4,628 | 125 | 188 | 13,578 | 1,625 | 7,820 | 34,390 |
| Bulk Terminal | -- | -- | 218 | -- | -- | -- | 269 | -- | -- | -- | -- | -- | 855 | 11 | 28 | 1,381 |
| Pipeline | -- | -- | 0 | -- | -- | -- | 38 | -- | -- | -- | -- | -- | 0 | 0 | 0 | 38 |
| Total | -- | -- | 5,094 | -- | -- | -- | 6,798 | -- | -- | -- | -- | -- | 14,433 | 1,636 | 7,848 | 35,809 |
| **Aviation Gasoline Blending Components** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 0 | 0 | 0 | 227 | 0 | 8 | 235 | 0 | 0 | 48 | 0 | 0 | 48 | 0 | 49 | 332 |
| Total | -- | -- | 0 | -- | -- | -- | 235 | -- | -- | -- | -- | -- | 48 | 0 | 49 | 332 |
| **Total Finished Motor Gasoline** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 7,442 | 421 | 7,863 | 5,116 | 1,213 | 2,446 | 8,775 | 1,742 | 11,689 | 5,825 | 654 | 141 | 20,051 | 1,483 | 7,164 | 45,336 |
| Bulk Terminal | -- | -- | 35,037 | -- | -- | -- | 23,504 | -- | -- | -- | -- | -- | 9,201 | 1,563 | 10,355 | 79,660 |
| Pipeline | -- | -- | 13,797 | -- | -- | -- | 16,524 | -- | -- | -- | -- | -- | 19,184 | 990 | 2,456 | 52,951 |
| Natural Gas Processing Plant | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| Total | -- | -- | 56,697 | -- | -- | -- | 48,803 | -- | -- | -- | -- | -- | 48,437 | 4,036 | 19,975 | 177,948 |
| **Finished Leaded Motor Gasoline** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 1,113 | 102 | 1,215 | 993 | 279 | 1,016 | 2,288 | 550 | 2,221 | 1,272 | 142 | 49 | 4,234 | 724 | 2,293 | 10,754 |
| Bulk Terminal | -- | -- | 8,302 | -- | -- | -- | 7,825 | -- | -- | -- | -- | -- | 2,913 | 544 | 3,059 | 22,643 |
| Pipeline | -- | -- | 2,373 | -- | -- | -- | 4,156 | -- | -- | -- | -- | -- | 3,719 | 448 | 360 | 11,056 |
| Natural Gas Processing Plant | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| Total | -- | -- | 11,890 | -- | -- | -- | 14,269 | -- | -- | -- | -- | -- | 10,867 | 1,716 | 5,712 | 44,454 |
| **Finished Unleaded Motor Gasoline** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 6,329 | 319 | 6,648 | 4,123 | 934 | 1,430 | 6,487 | 1,192 | 9,468 | 4,553 | 512 | 92 | 15,817 | 759 | 4,871 | 34,582 |
| Bulk Terminal | -- | -- | 26,735 | -- | -- | -- | 15,679 | -- | -- | -- | -- | -- | 6,288 | 1,019 | 7,296 | 57,017 |
| Pipeline | -- | -- | 11,424 | -- | -- | -- | 12,368 | -- | -- | -- | -- | -- | 15,465 | 542 | 2,096 | 41,895 |
| Total | -- | -- | 44,807 | -- | -- | -- | 34,534 | -- | -- | -- | -- | -- | 37,570 | 2,320 | 14,263 | 133,494 |
| **Finished Aviation Gasoline** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 39 | 0 | 39 | 75 | 28 | 16 | 119 | 72 | 274 | 147 | 0 | 0 | 493 | 32 | 184 | 867 |
| Bulk Terminal | -- | -- | 223 | -- | -- | -- | 247 | -- | -- | -- | -- | -- | 47 | 16 | 214 | 747 |
| Pipeline | -- | -- | 20 | -- | -- | -- | 140 | -- | -- | -- | -- | -- | 9 | 0 | 0 | 169 |
| Total | -- | -- | 282 | -- | -- | -- | 506 | -- | -- | -- | -- | -- | 549 | 48 | 398 | 1,783 |

See footnotes at end of table.

## Table 24. Stocks of Crude Oil and Petroleum Products by PAD District, July 31, 1988 (Continued)
(Thousand Barrels)

| Commodity | PAD District I | | | PAD District II | | | | PAD District III | | | | | | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | East Coast | Appalachian No.1 | Total | Ind., Ill., Ky. * | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast | |
| **Naphtha-Type Jet Fuel** | | | | | | | | | | | | | | | | |
| Refinery | 456 | 0 | 456 | 304 | 24 | 174 | 502 | 260 | 618 | 464 | 133 | 132 | 1,607 | 248 | 656 | 3,469 |
| Bulk Terminal | -- | -- | 922 | -- | -- | -- | 255 | -- | -- | -- | -- | -- | 149 | 7 | 505 | 1,838 |
| Pipeline | -- | -- | 107 | -- | -- | -- | 205 | -- | -- | -- | -- | -- | 579 | 105 | 407 | 1,403 |
| Total | -- | -- | 1,485 | -- | -- | -- | 962 | -- | -- | -- | -- | -- | 2,335 | 360 | 1,568 | 6,710 |
| **Kerosene-Type Jet Fuel** | | | | | | | | | | | | | | | | |
| Refinery | 2,128 | 20 | 2,148 | 1,321 | 277 | 580 | 2,178 | 441 | 3,510 | 2,514 | 47 | 48 | 6,560 | 414 | 4,387 | 15,687 |
| Bulk Terminal | -- | -- | 4,342 | -- | -- | -- | 3,126 | -- | -- | -- | -- | -- | 1,578 | 243 | 2,264 | 11,553 |
| Pipeline | -- | -- | 3,943 | -- | -- | -- | 2,882 | -- | -- | -- | -- | -- | 5,260 | 132 | 840 | 13,057 |
| Total | -- | -- | 10,433 | -- | -- | -- | 8,186 | -- | -- | -- | -- | -- | 13,398 | 789 | 7,491 | 40,297 |
| **Kerosene** | | | | | | | | | | | | | | | | |
| Refinery | 181 | 83 | 264 | 516 | 75 | 271 | 862 | 54 | 631 | 396 | 73 | 0 | 1,154 | 19 | 173 | 2,472 |
| Bulk Terminal | -- | -- | 1,857 | -- | -- | -- | 721 | -- | -- | -- | -- | -- | 467 | 28 | 53 | 3,126 |
| Pipeline | -- | -- | 219 | -- | -- | -- | 101 | -- | -- | -- | -- | -- | 276 | 0 | 6 | 602 |
| Total | -- | -- | 2,340 | -- | -- | -- | 1,684 | -- | -- | -- | -- | -- | 1,897 | 47 | 232 | 6,200 |
| **Distillate Fuel Oils** | | | | | | | | | | | | | | | | |
| Refinery | 6,965 | 501 | 7,466 | 4,656 | 1,741 | 3,015 | 9,412 | 1,035 | 9,229 | 3,801 | 1,494 | 118 | 15,677 | 1,700 | 5,651 | 39,906 |
| Bulk Terminal | -- | -- | 29,130 | -- | -- | -- | 13,332 | -- | -- | -- | -- | -- | 5,493 | 873 | 5,395 | 54,223 |
| Pipeline | -- | -- | 7,962 | -- | -- | -- | 7,799 | -- | -- | -- | -- | -- | 7,704 | 589 | 1,243 | 25,297 |
| Natural Gas Processing Plant | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 2 | 0 | 0 | 8 | 0 | 0 | 8 |
| Total | -- | -- | 44,558 | -- | -- | -- | 30,543 | -- | -- | -- | -- | -- | 28,882 | 3,162 | 12,289 | 119,434 |
| **Residual Fuel Oils** | | | | | | | | | | | | | | | | |
| Refinery | 2,337 | 88 | 2,425 | 2,428 | 359 | 177 | 2,964 | 174 | 3,011 | 2,598 | 188 | 16 | 5,987 | 482 | 5,111 | 16,969 |
| Bulk Terminal | -- | -- | 14,114 | -- | -- | -- | 851 | -- | -- | -- | -- | -- | 6,297 | 0 | 2,674 | 23,936 |
| Pipeline | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | -- | -- | 0 | 0 | 167 | 167 |
| Total | -- | -- | 16,539 | -- | -- | -- | 3,815 | -- | -- | -- | -- | -- | 12,284 | 482 | 7,952 | 41,072 |
| **Naphtha < 400 Deg. Petro. Feed. Use** | | | | | | | | | | | | | | | | |
| Refinery | 570 | 0 | 570 | 309 | 0 | 104 | 413 | 47 | 833 | 245 | 45 | 9 | 1,179 | 24 | 105 | 2,291 |
| Total | 570 | 0 | 570 | 309 | 0 | 104 | 413 | 47 | 833 | 245 | 45 | 9 | 1,179 | 24 | 105 | 2,291 |
| **Other Oils > 400 Deg. Petro. Feed. Use** | | | | | | | | | | | | | | | | |
| Refinery | 2 | 0 | 2 | 9 | 0 | 0 | 9 | 108 | 1,594 | 317 | 0 | 0 | 2,019 | 2 | 218 | 2,250 |
| Total | 2 | 0 | 2 | 9 | 0 | 0 | 9 | 108 | 1,594 | 317 | 0 | 0 | 2,019 | 2 | 218 | 2,250 |

See footnotes at end of table.

## Table 24. Stocks of Crude Oil and Petroleum Products by PAD District, July 31, 1988 (continued)
(Thousand Barrels)

| Commodity | PAD District I |  |  | PAD District II |  |  |  | PAD District III |  |  |  |  |  | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | East Coast | Appala-chian No.1 | Total | Ind., Ill., Ky. * | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast |  |
| **Special Naphthas** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 474 | 35 | 509 | 210 | 0 | 85 | 295 | 87 | 1,184 | 7 | 199 | 0 | 1,477 | 6 | 141 | 2,428 |
| Bulk Terminal | -- | -- | 547 | -- | -- | -- | 506 | -- | -- | -- | -- | -- | 141 | 0 | 18 | 1,212 |
| Total | -- | -- | 1,056 | -- | -- | -- | 801 | -- | -- | -- | -- | -- | 1,618 | 6 | 159 | 3,640 |
| **Lubricants** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 271 | 792 | 1,063 | 1,157 | 0 | 411 | 1,568 | 14 | 4,264 | 1,489 | 473 | 0 | 6,240 | 99 | 1,341 | 10,311 |
| Bulk Terminal | -- | -- | 1,887 | -- | -- | -- | 748 | -- | -- | -- | -- | -- | 534 | 1 | 542 | 3,712 |
| Total | -- | -- | 2,950 | -- | -- | -- | 2,316 | -- | -- | -- | -- | -- | 6,774 | 100 | 1,883 | 14,023 |
| **Waxes** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 0 | 88 | 88 | 80 | 0 | 35 | 115 | 64 | 229 | 134 | 31 | 0 | 458 | 127 | 114 | 902 |
| Total | -- | -- | 88 | -- | -- | -- | 115 | -- | -- | -- | -- | -- | 458 | 127 | 114 | 902 |
| **Petroleum Coke** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 532 | 0 | 532 | 308 | 1,977 | 279 | 2,564 | 15 | 863 | 2,347 | 216 | 0 | 3,441 | 17 | 1,916 | 8,470 |
| Total | 532 | 0 | 532 | 308 | 1,977 | 279 | 2,564 | 15 | 863 | 2,347 | 216 | 0 | 3,441 | 17 | 1,916 | 8,470 |
| **Asphalt and Road Oil** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 1,776 | 183 | 1,959 | 4,148 | 1,380 | 1,162 | 6,690 | 455 | 994 | 967 | 1,343 | 219 | 3,978 | 2,684 | 2,000 | 17,311 |
| Bulk Terminal | -- | -- | 3,819 | -- | -- | -- | 3,396 | -- | -- | -- | -- | -- | 766 | 61 | 237 | 8,279 |
| Total | -- | -- | 5,778 | -- | -- | -- | 10,086 | -- | -- | -- | -- | -- | 4,744 | 2,745 | 2,237 | 25,590 |
| **Miscellaneous Products** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 365 | 29 | 394 | 154 | 20 | 16 | 190 | 37 | 409 | 206 | 0 | 0 | 652 | 59 | 264 | 1,559 |
| Bulk Terminal | -- | -- | 533 | -- | -- | -- | 82 | -- | -- | -- | -- | -- | 956 | 1 | 34 | 1,606 |
| Pipeline | -- | -- | 0 | -- | -- | -- | 112 | -- | -- | -- | -- | -- | 283 | 0 | 63 | 458 |
| Natural Gas Processing Plant | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 0 | 1 | 2 | 0 | 25 | 1 | 0 | 26 |
| Total | -- | -- | 927 | -- | -- | -- | 384 | -- | -- | -- | -- | -- | 1,916 | 61 | 361 | 3,649 |
| **Total Stocks, All Oils** | -- | -- | **182,970** | -- | -- | -- | **249,697** | -- | -- | -- | -- | -- | **993,986** | **29,868** | **170,164** | **1,626,685** |

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[1] Includes 38,395 thousand barrels of domestic crude oil.

* Effective January 1987 "Appalachian No.2" is combined with "Ind., Ill., Ky.".

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 25. Refinery and Bulk Terminal Stocks of Selected Petroleum Products by State, July 31, 1988
(Thousand Barrels)

| State | Leaded Motor Gasoline | Unleaded Motor Gasoline | Kerosene | Distillate Fuel Oil | Residual Fuel Oil |
|---|---|---|---|---|---|
| **PAD District I Total** | **9,517** | **33,383** | **2,121** | **36,596** | **16,539** |
| Connecticut | 346 | 988 | 90 | 2,538 | 413 |
| Delaware, D.C., Maryland | 337 | 2,163 | 243 | 3.234 | 1,454 |
| Florida | 1,506 | 5,072 | 222 | 1,935 | 904 |
| Georgia | 1,007 | 2,105 | 108 | 1,147 | 261 |
| Maine, New Hampshire, Vermont | 198 | 658 | 84 | 1,682 | 461 |
| Massachusetts | 151 | 1,930 | 63 | 2,133 | 1,073 |
| New Jersey | 1,283 | 7,737 | 171 | 8,658 | 7,088 |
| New York | 1,011 | 2,720 | 178 | 4,607 | 2,461 |
| North Carolina | 1,014 | 1,840 | 292 | 1,790 | 392 |
| Pennsylvania | 1,023 | 3,942 | 367 | 4,860 | 1,130 |
| Rhode Island | 287 | 391 | w | 817 | w |
| South Carolina | 510 | 1,109 | 128 | 794 | w |
| Virginia | 732 | 2,571 | 154 | 2,297 | 548 |
| West Virginia | 112 | 157 | w | 104 | w |
| **PAD District II Total** | **10,113** | **22,166** | **1,583** | **22,744** | **3,815** |
| Illinois | 1,839 | 4,027 | 302 | 3,869 | 1,379 |
| Indiana | 991 | 2,998 | 119 | 2,632 | 806 |
| Iowa | 538 | 783 | w | 1,100 | w |
| Kansas, Nebraska | 1,060 | 1,429 | 20 | 2,187 | 76 |
| Kentucky | 692 | 1,144 | 109 | 847 | w |
| Michigan | 978 | 2,616 | 91 | 1,845 | 156 |
| Minnesota | 443 | 1,185 | w | 2,234 | 161 |
| Missouri | 441 | 908 | w | 800 | w |
| North Dakota, South Dakota | 165 | 386 | w | 798 | w |
| Ohio | 737 | 2,785 | 511 | 2,133 | 381 |
| Oklahoma | 861 | 1,192 | w | 2,017 | 182 |
| Tennessee | 796 | 1,845 | 78 | 1,149 | 201 |
| Wisconsin | 572 | 868 | w | 1,133 | 167 |
| **PAD District III Total** | **7,147** | **22,105** | **1,621** | **21,170** | **12,284** |
| Alabama | 559 | 1,165 | 104 | 1,030 | 838 |
| Arkansas | 243 | 400 | w | 193 | w |
| Louisiana | 1,163 | 4,768 | 411 | 3,774 | 5,161 |
| Mississippi | 733 | 1,594 | 22 | 2,202 | w |
| New Mexico | 161 | 257 | w | 351 | 16 |
| Texas | 4,288 | 13,921 | 1,080 | 13,620 | 6,086 |
| **PAD District IV Total** | **1,268** | **1,778** | **47** | **2,573** | **482** |
| Colorado | 288 | 566 | w | 550 | w |
| Idaho | 114 | 266 | w | 207 | w |
| Montana | 428 | 431 | w | 710 | 86 |
| Utah | 206 | 194 | w | 435 | 102 |
| Wyoming | 232 | 321 | w | 671 | w |
| **PAD District V Total** | **5,352** | **12,167** | **226** | **11,046** | **7,785** |
| Alaska | 217 | 374 | w | 1,171 | w |
| Arizona | 344 | 601 | w | 262 | w |
| California | 3,023 | 8,049 | 122 | 6,295 | 4,693 |
| Hawaii | 90 | 546 | w | 402 | w |
| Nevada | 74 | 206 | w | 149 | w |
| Oregon | 427 | 553 | w | 852 | 301 |
| Washington | 1,177 | 1,838 | w | 1,915 | 1,371 |
| **U.S. Total** | **33,397** | **91,599** | **5,598** | **94,129** | **40,905** |

w = Withheld to avoid disclosure of individual company data.
Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 26. Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, and Barge Between PAD Districts, July 1988
(Thousand Barrels)

| Commodity | From I to | | | From II to | | | | From III to | | | | From IV to | | | From V to | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | II | III | V | I | III | IV | V | I | II | IV | V | II | III | V | I | II | III | IV |
| **Crude Oil** | **0** | **0** | **0** | **135** | **2,510** | **831** | **0** | **504** | **47,474** | **0** | **0** | **4,789** | **1,846** | **0** | **1,411** | **0** | **15,418** | **0** |
| **Petroleum Products** | **7,959** | **279** | **0** | **4,429** | **5,815** | **1,915** | **0** | **75,063** | **27,710** | **0** | **2,135** | **1,431** | **1,358** | **1,564** | **0** | **0** | **39** | **0** |
| Pentanes Plus | 0 | 0 | 0 | 0 | 105 | 0 | 0 | 0 | 891 | 0 | 0 | 72 | 132 | 0 | 0 | 0 | 0 | 0 |
| Liquefied Petroleum Gases | 0 | 0 | 0 | 558 | 3,146 | 30 | 0 | 1,374 | 3,793 | 0 | 0 | 568 | 1,226 | 0 | 0 | 0 | 0 | 0 |
| Unfinished Oils | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 177 | 0 | 0 | 156 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Blending Components | | | | | | | | | | | | | | | | | | |
| Motor Gasoline | 10 | 48 | 0 | 176 | 0 | 0 | 0 | 114 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Aviation Gasoline | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Finished Motor Gasoline | 5,718 | 0 | 0 | 2,511 | 1,658 | 1,155 | 0 | 45,433 | 14,795 | 0 | 1,016 | 513 | 0 | 1,019 | 0 | 0 | 0 | 0 |
| Finished Leaded Motor Gasoline | 1,254 | 0 | 0 | 848 | 394 | 262 | 0 | 7,089 | 2,865 | 0 | 263 | 213 | 0 | 430 | 0 | 0 | 0 | 0 |
| Finished Unleaded Motor Gasoline | 4,464 | 0 | 0 | 1,663 | 1,264 | 893 | 0 | 38,344 | 11,930 | 0 | 753 | 300 | 0 | 589 | 0 | 0 | 0 | 0 |
| Finished Aviation Gasoline | 5 | 0 | 0 | 0 | 0 | 18 | 0 | 96 | 108 | 0 | 69 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Naphtha-Type Jet Fuel | 0 | 0 | 0 | 0 | 83 | 0 | 0 | 468 | 1 | 0 | 240 | 25 | 0 | 102 | 0 | 0 | 0 | 0 |
| Kerosene-Type Jet Fuel | 219 | 0 | 0 | 246 | 119 | 487 | 0 | 9,463 | 2,971 | 0 | 153 | 2 | 0 | 97 | 0 | 0 | 0 | 0 |
| Kerosene | 7 | 0 | 0 | 6 | 150 | 0 | 0 | 262 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Distillate Fuel Oil | 1,910 | 0 | 0 | 507 | 472 | 225 | 0 | 15,678 | 4,343 | 0 | 406 | 251 | 0 | 346 | 0 | 0 | 0 | 0 |
| Residual Fuel Oil | 10 | 0 | 0 | 14 | 57 | 0 | 0 | 482 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Petrochemical Feedstocks[1] | 80 | 11 | 0 | 54 | 17 | 0 | 0 | 19 | 33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Special Naphthas | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 207 | 90 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lubricants | 0 | 65 | 0 | 75 | 8 | 0 | 0 | 963 | 308 | 0 | 95 | 0 | 0 | 0 | 0 | 0 | 39 | 0 |
| Waxes | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Asphalt and Road Oil | 0 | 128 | 0 | 282 | 0 | 0 | 0 | 231 | 375 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Miscellaneous Products | 0 | 25 | 0 | 0 | 0 | 0 | 0 | 91 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | **7,959** | **279** | **0** | **4,564** | **8,325** | **2,746** | **0** | **75,567** | **75,184** | **0** | **2,135** | **6,220** | **3,204** | **1,564** | **1,411** | **0** | **15,457** | **0** |

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[1] Includes naphtha less than 400 degrees F endpoint and other oils equal to or greater than 400 degrees F endpoint.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 27. Movements of Crude Oil and Petroleum Products by Pipeline Between PAD Districts, July 1988
(Thousand Barrels)

| Commodity | From I to | | From II to | | | From III to | | | | From IV to | | | From V to | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | II | III | I | III | IV | I | II | IV | V | II | III | V | III | IV |
| **Crude Oil** | 0 | 0 | 0 | 2,510 | 831 | 0 | 47,474 | 0 | 0 | 4,789 | 1,846 | 0 | 2,563 | 0 |
| **Petroleum Products** | 7,841 | 0 | 2,088 | 5,733 | 1,915 | 61,903 | 24,142 | 0 | 1,815 | 1,431 | 1,358 | 1,564 | 0 | 0 |
| Pentanes Plus | 0 | 0 | 0 | 105 | 0 | 0 | 891 | 0 | 0 | 72 | 132 | 0 | 0 | 0 |
| Liquefied Petroleum Gases | 0 | 0 | 558 | 3,146 | 30 | 1,216 | 3,782 | 0 | 0 | 568 | 1,226 | 0 | 0 | 0 |
| Blending Components | | | | | | | | | | | | | | |
| Motor Gasoline | 0 | 0 | 176 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Aviation Gasoline | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Finished Motor Gasoline | 5,718 | 0 | 1,025 | 1,658 | 1,155 | 38,552 | 13,040 | 0 | 1,016 | 513 | 0 | 1,019 | 0 | 0 |
| Finished Leaded Motor Gasoline | 1,254 | 0 | 109 | 394 | 262 | 6,125 | 2,500 | 0 | 263 | 213 | 0 | 430 | 0 | 0 |
| Finished Unleaded Motor Gasoline | 4,464 | 0 | 916 | 1,264 | 893 | 32,427 | 10,540 | 0 | 753 | 300 | 0 | 589 | 0 | 0 |
| Finished Aviation Gasoline | 5 | 0 | 0 | 0 | 18 | 38 | 97 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Naphtha-Type Jet Fuel | 0 | 0 | 0 | 83 | 0 | 157 | 1 | 0 | 240 | 25 | 0 | 102 | 0 | 0 |
| Kerosene-Type Jet Fuel | 219 | 0 | 149 | 119 | 487 | 7,922 | 2,737 | 0 | 153 | 2 | 0 | 97 | 0 | 0 |
| Kerosene | 7 | 0 | 0 | 150 | 0 | 248 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Distillate Fuel Oil | 1,892 | 0 | 180 | 472 | 225 | 13,770 | 3,594 | 0 | 406 | 251 | 0 | 346 | 0 | 0 |
| Residual Fuel Oil | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Miscellaneous Products | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | 7,841 | 0 | 2,088 | 8,243 | 2,746 | 61,903 | 71,616 | 0 | 1,815 | 6,220 | 3,204 | 1,564 | 2,563 | 0 |

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 28. Movements of Crude Oil and Petroleum Products by Tanker and Barge Between PAD Districts, July 1988
(Thousand Barrels)

| Commodity | From I to | | | From II to | | | From III to | | | | | | From V to | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | II | III | V | I | III | V | I | New England | Central Atlantic | Lower Atlantic | II | V | I | II | III |
| **Crude Oil** | 0 | 0 | 0 | 135 | 0 | 0 | 504 | 0 | 504 | 0 | 0 | 0 | 1,411 | 0 | 12,855 |
| **Petroleum Products** | 118 | 279 | 0 | 2,341 | 82 | 0 | 13,160 | 0 | 1,807 | 11,353 | 3,568 | 320 | 0 | 0 | 39 |
| Liquefied Petroleum Gases | 0 | 0 | 0 | 0 | 0 | 0 | 158 | 0 | 0 | 158 | 11 | 0 | 0 | 0 | 0 |
| Unfinished Oils | 0 | 0 | 0 | 0 | 0 | 0 | 177 | 0 | 42 | 135 | 0 | 156 | 0 | 0 | 0 |
| Motor Gasoline Blending Components | 10 | 48 | 0 | 0 | 0 | 0 | 114 | 0 | 114 | 0 | 0 | 0 | 0 | 0 | 0 |
| Finished Motor Gasoline | 0 | 0 | 0 | 1,486 | 0 | 0 | 6,881 | 0 | 109 | 6,772 | 1,755 | 0 | 0 | 0 | 0 |
| Finished Leaded Motor Gasoline | 0 | 0 | 0 | 739 | 0 | 0 | 964 | 0 | 0 | 964 | 365 | 0 | 0 | 0 | 0 |
| Finished Unleaded Motor Gasoline | 0 | 0 | 0 | 747 | 0 | 0 | 5,917 | 0 | 109 | 5,808 | 1,390 | 0 | 0 | 0 | 0 |
| Finished Aviation Gasoline | 0 | 0 | 0 | 0 | 0 | 0 | 58 | 0 | 34 | 24 | 11 | 69 | 0 | 0 | 0 |
| Naphtha-Type Jet Fuel | 0 | 0 | 0 | 0 | 0 | 0 | 311 | 0 | 0 | 311 | 0 | 0 | 0 | 0 | 0 |
| Kerosene-Type Jet Fuel | 0 | 0 | 0 | 97 | 0 | 0 | 1,541 | 0 | 239 | 1,302 | 234 | 0 | 0 | 0 | 0 |
| Kerosene | 0 | 0 | 0 | 6 | 0 | 0 | 14 | 0 | 0 | 14 | 0 | 0 | 0 | 0 | 0 |
| Distillate Fuel Oil | 18 | 0 | 0 | 327 | 0 | 0 | 1,908 | 0 | 511 | 1,397 | 749 | 0 | 0 | 0 | 0 |
| Residual Fuel Oil | 10 | 0 | 0 | 14 | 57 | 0 | 482 | 0 | 0 | 482 | 0 | 0 | 0 | 0 | 0 |
| Petrochemical Feedstocks[1] | 80 | 11 | 0 | 54 | 17 | 0 | 19 | 0 | 0 | 19 | 33 | 0 | 0 | 0 | 0 |
| Special Naphthas | 0 | 2 | 0 | 0 | 0 | 0 | 207 | 0 | 109 | 98 | 90 | 0 | 0 | 0 | 0 |
| Lubricants | 0 | 65 | 0 | 75 | 8 | 0 | 963 | 0 | 565 | 398 | 308 | 95 | 0 | 0 | 39 |
| Waxes | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 |
| Asphalt and Road Oil | 0 | 128 | 0 | 282 | 0 | 0 | 231 | 0 | 6 | 225 | 375 | 0 | 0 | 0 | 0 |
| Miscellaneous Products | 0 | 25 | 0 | 0 | 0 | 0 | 91 | 0 | 73 | 18 | 2 | 0 | 0 | 0 | 0 |
| **Total** | 118 | 279 | 0 | 2,476 | 82 | 0 | 13,664 | 0 | 2,311 | 11,353 | 3,568 | 320 | 1,411 | 0 | 12,894 |

[1] Includes naphtha less than 400 degrees F endpoint and other oils equal to or greater than 400 degrees F endpoint.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 29. Net Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, and Barge Between PAD Districts, July 1988

(Thousand Barrels)

| Commodity | PAD District I | | | PAD District II | | | PAD District III | | | PAD District IV | | | PAD District V | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Receipts into PADD I | Ship-ments from PADD I | Net Receipts PADD I | Receipts into PADD II | Ship-ments from PADD II | Net Receipts PADD II | Receipts into PADD III | Ship-ments from PADD III | Net Receipts PADD III | Receipts into PADD IV | Ship-ments from PADD IV | Net Receipts PADD IV | Receipts into PADD V | Ship-ments from PADD V | Net Receipts PADD V |
| **Crude Oil** | **2,050** | **0** | **2,050** | **52,263** | **3,476** | **48,787** | **19,774** | **47,978** | **-28,204** | **831** | **6,635** | **-5,804** | **0** | **16,829** | **-16,829** |
| **Petroleum Products** | **79,492** | **8,238** | **71,254** | **37,100** | **12,159** | **24,941** | **7,491** | **104,908** | **-97,417** | **1,915** | **4,353** | **-2,438** | **3,699** | **39** | **3,660** |
| Pentanes Plus | 0 | 0 | 0 | 963 | 105 | 858 | 237 | 891 | -654 | 0 | 204 | -204 | 0 | 0 | 0 |
| Liquefied Petroleum Gases | 1,932 | 0 | 1,932 | 4,361 | 3,734 | 627 | 4,372 | 5,167 | -795 | 30 | 1,794 | -1,764 | 0 | 0 | 0 |
| Unfinished Oils | 177 | 0 | 177 | 0 | 0 | 0 | 0 | 333 | -333 | 0 | 0 | 0 | 156 | 0 | 156 |
| Blending Components | | | | | | | | | | | | | | | |
| Motor Gasoline | 290 | 58 | 232 | 10 | 176 | -166 | 48 | 114 | -66 | 0 | 0 | 0 | 0 | 0 | 0 |
| Aviation Gasoline | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Finished Motor Gasoline | 47,944 | 5,718 | 42,226 | 21,026 | 5,324 | 15,702 | 1,658 | 61,244 | -59,586 | 1,155 | 1,532 | -377 | 2,035 | 0 | 2,035 |
| Finished Leaded Motor Gasoline | 7,937 | 1,254 | 6,683 | 4,332 | 1,504 | 2,828 | 394 | 10,217 | -9,823 | 262 | 643 | -381 | 693 | 0 | 693 |
| Finished Unleaded Motor Gasoline | 40,007 | 4,464 | 35,543 | 16,694 | 3,820 | 12,874 | 1,264 | 51,027 | -49,763 | 893 | 889 | 4 | 1,342 | 0 | 1,342 |
| Finished Aviation Gasoline | 96 | 5 | 91 | 113 | 18 | 95 | 0 | 273 | -273 | 18 | 0 | 18 | 69 | 0 | 69 |
| Naphtha-Type Jet Fuel | 468 | 0 | 468 | 26 | 83 | -57 | 83 | 709 | -626 | 0 | 127 | -127 | 342 | 0 | 342 |
| Kerosene-Type Jet Fuel | 9,709 | 219 | 9,490 | 3,192 | 852 | 2,340 | 119 | 12,587 | -12,468 | 487 | 99 | 388 | 250 | 0 | 250 |
| Kerosene | 268 | 7 | 261 | 7 | 156 | -149 | 150 | 262 | -112 | 0 | 0 | 0 | 0 | 0 | 0 |
| Distillate Fuel Oil | 16,185 | 1,910 | 14,275 | 6,504 | 1,204 | 5,300 | 472 | 20,427 | -19,955 | 225 | 597 | -372 | 752 | 0 | 752 |
| Residual Fuel Oil | 496 | 10 | 486 | 10 | 71 | -61 | 57 | 482 | -425 | 0 | 0 | 0 | 0 | 0 | 0 |
| Petrochemical Feedstocks[1] | 73 | 91 | -18 | 113 | 71 | 42 | 28 | 52 | -24 | 0 | 0 | 0 | 0 | 0 | 0 |
| Special Naphthas | 207 | 2 | 205 | 90 | 0 | 90 | 2 | 297 | -295 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lubricants | 1,038 | 65 | 973 | 308 | 83 | 225 | 112 | 1,366 | -1,254 | 0 | 0 | 0 | 95 | 39 | 56 |
| Waxes | 5 | 0 | 5 | 0 | 0 | 0 | 0 | 5 | -5 | 0 | 0 | 0 | 0 | 0 | 0 |
| Asphalt and Road Oil | 513 | 128 | 385 | 375 | 282 | 93 | 128 | 606 | -478 | 0 | 0 | 0 | 0 | 0 | 0 |
| Miscellaneous Products | 91 | 25 | 66 | 2 | 0 | 2 | 25 | 93 | -68 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | **81,542** | **8,238** | **73,304** | **89,363** | **15,635** | **73,728** | **27,265** | **152,886** | **-125,621** | **2,746** | **10,988** | **-8,242** | **3,699** | **16,868** | **-13,169** |

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[1] Includes naphtha less than 400 degrees F endpoint and other oils equal to or greater than 400 degrees F endpoint.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 30. Production of Residual Fuel Oil by Sulfur Content by PAD District, July, 1988
(Thousand Barrels)

| Commodity | PAD District I |  |  | PAD District II |  |  |  | PAD District III |  |  |  |  |  | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | East Coast | Appalachian No.1 | Total | Ind., Ill., Ky. * | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast |  |
| **Residual Fuel Oil** | **4,265** | **53** | **4,318** | **1,573** | **241** | **119** | **1,933** | **441** | **5,255** | **4,914** | **305** | **17** | **10,932** | **284** | **10,840** | **28,307** |
| 0.00 to 0.30% Sulfur | 908 | 19 | 927 | 26 | 0 | 0 | 26 | 84 | 47 | 700 | 69 | 9 | 909 | 46 | 1,108 | 3,016 |
| 0.31 to 1.00% Sulfur | 2,194 | 0 | 2,194 | 209 | 0 | 63 | 272 | 265 | 1,338 | 577 | 176 | 8 | 2,364 | 28 | 915 | 5,773 |
| Greater Than 1.00% Sulfur | 1,163 | 34 | 1,197 | 1,338 | 241 | 56 | 1,635 | 92 | 3,870 | 3,637 | 60 | 0 | 7,659 | 210 | 8,817 | 19,518 |

* Effective January 1987 "Appalachian No.2" is combined with "Ind., Ill., Ky.".

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 31. Stocks of Residual Fuel Oil by Sulfur Content by PAD District, July 31, 1988
(Thousand Barrels)

| Commodity | PAD District I |  |  | PAD District II |  |  |  | PAD District III |  |  |  |  |  | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | East Coast | Appalachian No.1 | Total | Ind., Ill., Ky. * | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast |  |
| **Residual Fuel Oil -- 0.00 to 0.30% Sulfur** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 481 | 63 | 544 | 75 | 0 | 0 | 75 | 24 | 40 | 982 | 3 | 8 | 1,057 | 59 | 671 | 2,406 |
| Bulk Terminal | -- | -- | 3,277 | -- | -- | -- | 202 | -- | -- | -- | -- | -- | 283 | 0 | 0 | 3,762 |
| **Total** | **--** | **--** | **3,821** | **--** | **--** | **--** | **277** | **--** | **--** | **--** | **--** | **--** | **1,340** | **59** | **671** | **6,168** |
| **Residual Fuel Oil -- 0.31 to 1.00% Sulfur** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 1,000 | 0 | 1,000 | 420 | 0 | 66 | 486 | 32 | 692 | 182 | 140 | 8 | 1,054 | 116 | 565 | 3,221 |
| Bulk Terminal | -- | -- | 5,149 | -- | -- | -- | 308 | -- | -- | -- | -- | -- | 3,295 | 0 | 648 | 9,400 |
| **Total** | **--** | **--** | **6,149** | **--** | **--** | **--** | **794** | **--** | **--** | **--** | **--** | **--** | **4,349** | **116** | **1,213** | **12,621** |
| **Residual Fuel Oil -- Greater than 1.00% Sulfur** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 856 | 25 | 881 | 1,933 | 359 | 111 | 2,403 | 118 | 2,279 | 1,434 | 45 | 0 | 3,876 | 307 | 3,875 | 11,342 |
| Bulk Terminal | -- | -- | 5,688 | -- | -- | -- | 341 | -- | -- | -- | -- | -- | 2,719 | 0 | 2,026 | 10,774 |
| **Total** | **--** | **--** | **6,569** | **--** | **--** | **--** | **2,744** | **--** | **--** | **--** | **--** | **--** | **6,595** | **307** | **5,901** | **22,116** |

* Effective January 1987 "Appalachian No.2" is combined with "Ind., Ill., Ky.".

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 32. Movements of Residual Fuel Oil by Tanker and Barge Between PAD Districts, by Sulfur Content, July 1988
(Thousand Barrels)

| Commodity | From I to |  |  | From II to |  |  | From III to |  |  |  |  |  | From V to |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | II | III | V | I | III | V | I | New England | Central Atlantic | Lower Atlantic | II | V | I | II | III |
| **Residual Fuel Oil** | **10** | **0** | **0** | **14** | **57** | **0** | **482** | **0** | **0** | **482** | **0** | **0** | **0** | **0** | **0** |
| 0.00 to 0.30% Sulfur | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0.31 to 1.00% Sulfur | 0 | 0 | 0 | 0 | 0 | 0 | 274 | 0 | 0 | 274 | 0 | 0 | 0 | 0 | 0 |
| Greater Than 1.00% Sulfur | 10 | 0 | 0 | 14 | 57 | 0 | 208 | 0 | 0 | 208 | 0 | 0 | 0 | 0 | 0 |

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 33. Imports of Residual Fuel Oil by Sulfur Content by Country of Origin, July 1988
(Thousand Barrels)

| Country | Residual Fuel Oil | | | |
|---|---|---|---|---|
| | 0.00 to 0.30% | 0.31 to 1.00% | Greater Than 1.00% | Total |
| **Arab OPEC** | | | | |
| Algeria | 1,076 | 0 | 0 | 1,076 |
| Iraq | 0 | 0 | 0 | 0 |
| Kuwait | 0 | 0 | 0 | 0 |
| Libya | 0 | 0 | 0 | 0 |
| Neutral Zone | 0 | 0 | 0 | 0 |
| Qatar | 0 | 0 | 0 | 0 |
| Saudi Arabia | 0 | 0 | 0 | 0 |
| United Arab Emirates | 0 | 0 | 0 | 0 |
| Subtotal Arab OPEC | 1,076 | 0 | 0 | 1,076 |
| **Other OPEC** | | | | |
| Ecuador | 0 | 0 | 361 | 361 |
| Gabon | 0 | 0 | 0 | 0 |
| Indonesia | 0 | 0 | 0 | 0 |
| Iran | 0 | 0 | 0 | 0 |
| Nigeria | 0 | 125 | 0 | 125 |
| Venezuela | 0 | 0 | 877 | 877 |
| Subtotal Other OPEC | 0 | 125 | 1,238 | 1,363 |
| **Other** | | | | |
| Angola | 0 | 0 | 0 | 0 |
| Australia | 0 | 0 | 0 | 0 |
| Bahamas | 0 | 0 | 453 | 453 |
| Bolivia | 0 | 0 | 0 | 0 |
| Brazil | 630 | 0 | 0 | 630 |
| Brunei | 0 | 0 | 0 | 0 |
| Canada | 213 | 0 | 816 | 1,029 |
| China, People's Republic | 0 | 0 | 0 | 0 |
| Congo | 0 | 0 | 0 | 0 |
| Egypt | 0 | 0 | 0 | 0 |
| France | 0 | 0 | 385 | 385 |
| Ghana | 0 | 0 | 0 | 0 |
| Liberia | 0 | 0 | 0 | 0 |
| Malaysia | 0 | 0 | 0 | 0 |
| Mexico | 0 | 0 | 523 | 523 |
| Netherlands | 0 | 0 | 0 | 0 |
| Netherlands Antilles | 0 | 598 | 0 | 598 |
| Norway | 0 | 212 | 0 | 212 |
| Oman | 0 | 0 | 0 | 0 |
| Peru | 0 | 0 | 330 | 330 |
| Puerto Rico | 0 | 0 | 0 | 0 |
| Romania | 0 | 0 | 0 | 0 |
| Spain | 1 | 170 | 534 | 705 |
| Syria | 0 | 0 | 0 | 0 |
| Trinidad | 0 | 0 | 681 | 681 |
| Tunisia | 0 | 0 | 0 | 0 |
| United Kingdom | 0 | 641 | 0 | 641 |
| Virgin Islands | 271 | 553 | 1,505 | 2,329 |
| Yugoslavia | 0 | 0 | 0 | 0 |
| Zaire | 0 | 0 | 0 | 0 |
| Other Western Hemisphere | 0 | 0 | 973 | 973 |

See footnotes at end of table.

## Table 33. Imports of Residual Fuel Oil by Sulfur Content by Country of Origin, July 1988 (Continued)
(Thousand Barrels)

| Country | Residual Fuel Oil | | | |
|---|---|---|---|---|
| | 0.00 to 0.30% | 0.31 to 1.00% | Greater Than 1.00% | Total |
| **Other** | | | | |
| Other Eastern Hemisphere | 660 | 943 | 0 | 1,603 |
| Subtotal Other | 1,775 | 3,117 | 6,200 | 11,092 |
| **Total Imports** | **2,851** | **3,242** | **7,438** | **13,531** |

Note: Total may not equal sum of components due to independent rounding.
Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 34. Imports of Residual Fuel Oil by Sulfur Content by State of Entry, July 1988
(Thousand Barrels)

| State | Residual Fuel Oil | | | |
|---|---|---|---|---|
| | 0.00 to 0.30% | 0.31 to 1.00% | Greater Than 1.00% | Total |
| **PAD District I** | **2,545** | **3,242** | **6,898** | **12,685** |
| Florida | 0 | 282 | 222 | 504 |
| Maine | 0 | 170 | 1,195 | 1,365 |
| Maryland | 171 | 622 | 194 | 987 |
| Massachusetts | 0 | 328 | 1,485 | 1,813 |
| New Jersey | 521 | 633 | 1,500 | 2,654 |
| New York | 1,487 | 814 | 1,266 | 3,567 |
| North Carolina | 0 | 0 | 383 | 383 |
| Pennsylvania | 366 | 393 | 116 | 875 |
| South Carolina | 0 | 0 | 266 | 266 |
| Vermont | 0 | 0 | 10 | 10 |
| Virginia | 0 | 0 | 261 | 261 |
| **PAD District II** | **47** | **0** | **17** | **64** |
| Michigan | 47 | 0 | 0 | 47 |
| North Dakota | 0 | 0 | 17 | 17 |
| **PAD District III** | **1** | **0** | **523** | **524** |
| Alabama | 0 | 0 | 193 | 193 |
| Louisiana | 0 | 0 | 330 | 330 |
| Texas | 1 | 0 | 0 | 1 |
| **PAD District V** | **258** | **0** | **0** | **258** |
| Hawaii | 258 | 0 | 0 | 258 |
| **All PAD Districts** | **2,851** | **3,242** | **7,438** | **13,531** |

Note: Total may not equal sum of components due to independent rounding.
Sources and estimation procedures: See Explanatory Notes 1 and 2.

# Appendix A

## District Descriptions and Maps

## Appendix A

# District Descriptions and Maps

he following are the Refining Districts which make up the etroleum Administration for Defense (PAD) Districts.

## AD District I

***ast Coast:*** District of Columbia and the States of Maine, ew Hampshire, Vermont, Massachusetts, Rhode Island, onnecticut, New Jersey, Delaware, Maryland, Virginia, orth Carolina, South Carolina, Georgia, Florida, and the llowing counties of the State of New York: Cayuga, ompkins, Chemung, and all counties east and north thereof. lso the following counties in the State of Pennsylvania: radford, Sullivan, Columbia, Montour, Northumberland, auphin, York, and all counties east thereof.

***ppalachian No. 1:*** The State of West Virginia and those arts of the States of Pennsylvania and New York not included the East Coast District.

## AD District II

***ndiana-Illinois-Kentucky:*** The States of Indiana, Illinois, entucky, Tennessee, Michigan, and Ohio.

***innesota-Wisconsin-North and South Dakota:*** The States Minnesota, Wisconsin, North Dakota, and South Dakota.

***klahoma-Kansas-Missouri:*** The States of Oklahoma, ansas, Missouri, Nebraska, and Iowa.

## AD District III

***exas Inland:*** The State of Texas except the Texas Gulf Coast istrict.

***Texas Gulf Coast:*** The following counties of the State of Texas: Newton, Orange, Jefferson, Jasper, Tyler, Hardin, Liberty, Chambers, Polk, San Jacinto, Montgomery, Harris, Galveston, Waller, Fort Bend, Brazoria, Wharton, Matagorda, Jackson, Victoria, Calhoun, Refugio, Aransas, San Patricio, Nueces, Kleberg, Kenedy, Willacy, and Cameron.

***Louisiana Gulf Coast:*** The following Parishes of the State of Louisiana: Vernon, Rapides, Avoyelles, Pointe Coupee, West Feliciana, East Feliciana, Saint Helena, Tangipahoa, Washington, and all Parishes south thereof. Also the following counties of the State of Mississippi: Pearl River, Stone, George, Hancock, Harrison, and Jackson. Also the following counties of the State of Alabama: Mobile and Baldwin.

***North Louisiana-Arkansas:*** The State of Arkansas and those parts of the States of Louisiana, Mississippi, and Alabama not included in the Louisiana Gulf Coast District.

***New Mexico:*** The State of New Mexico.

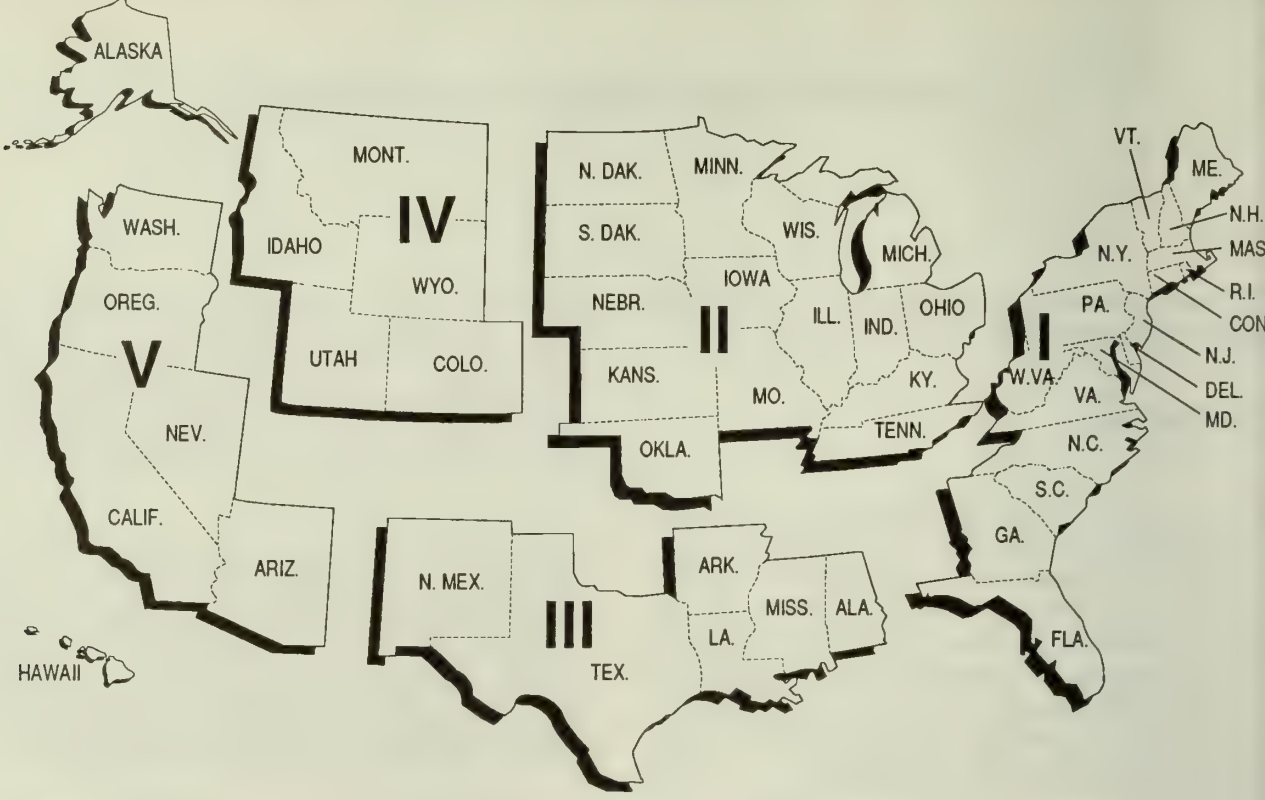
## PAD District IV

***Rocky Mountain:*** The States of Montana, Idaho, Wyoming, Utah, and Colorado.

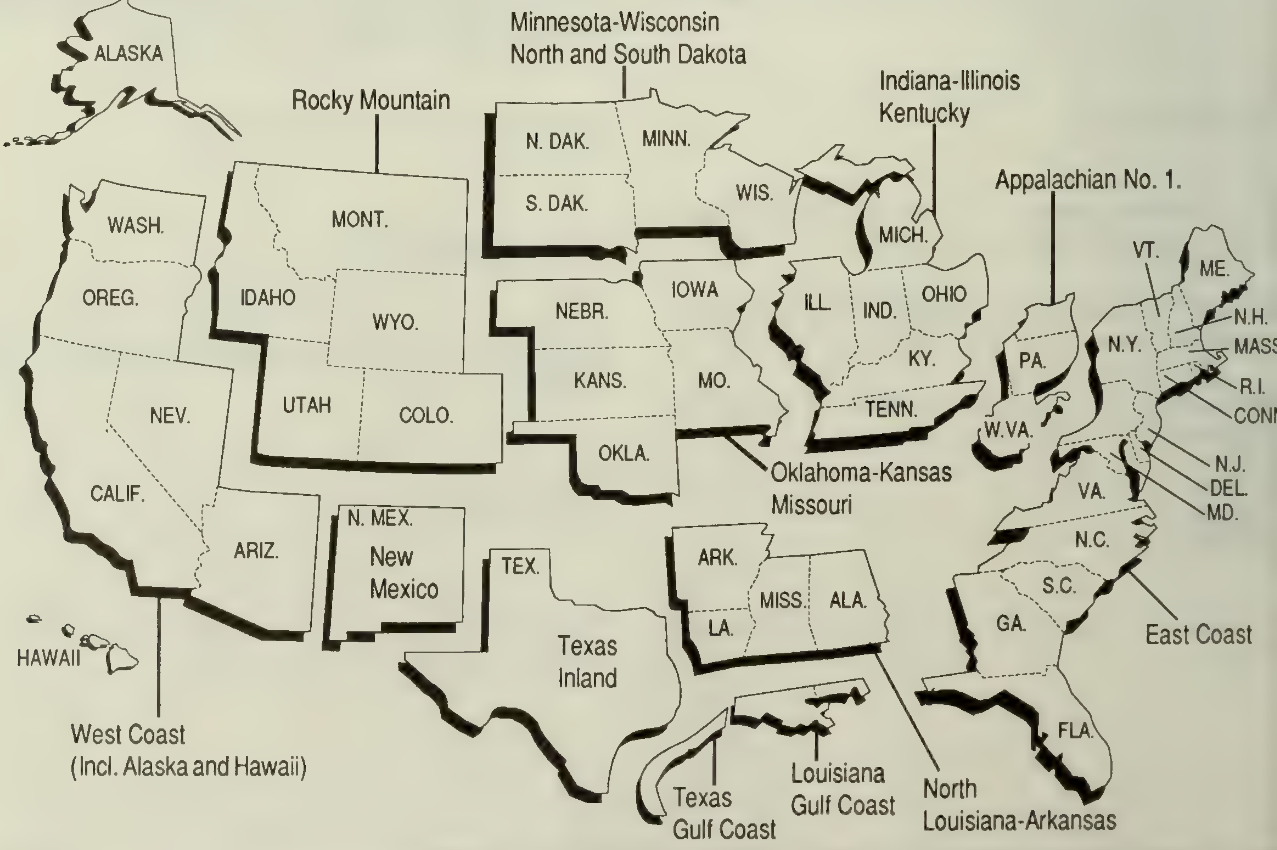
## PAD District V

***West Coast:*** The States of Washington, Oregon, California, Nevada, Arizona, Alaska, and Hawaii.

## Petroleum Administration for Defense (PAD) Districts

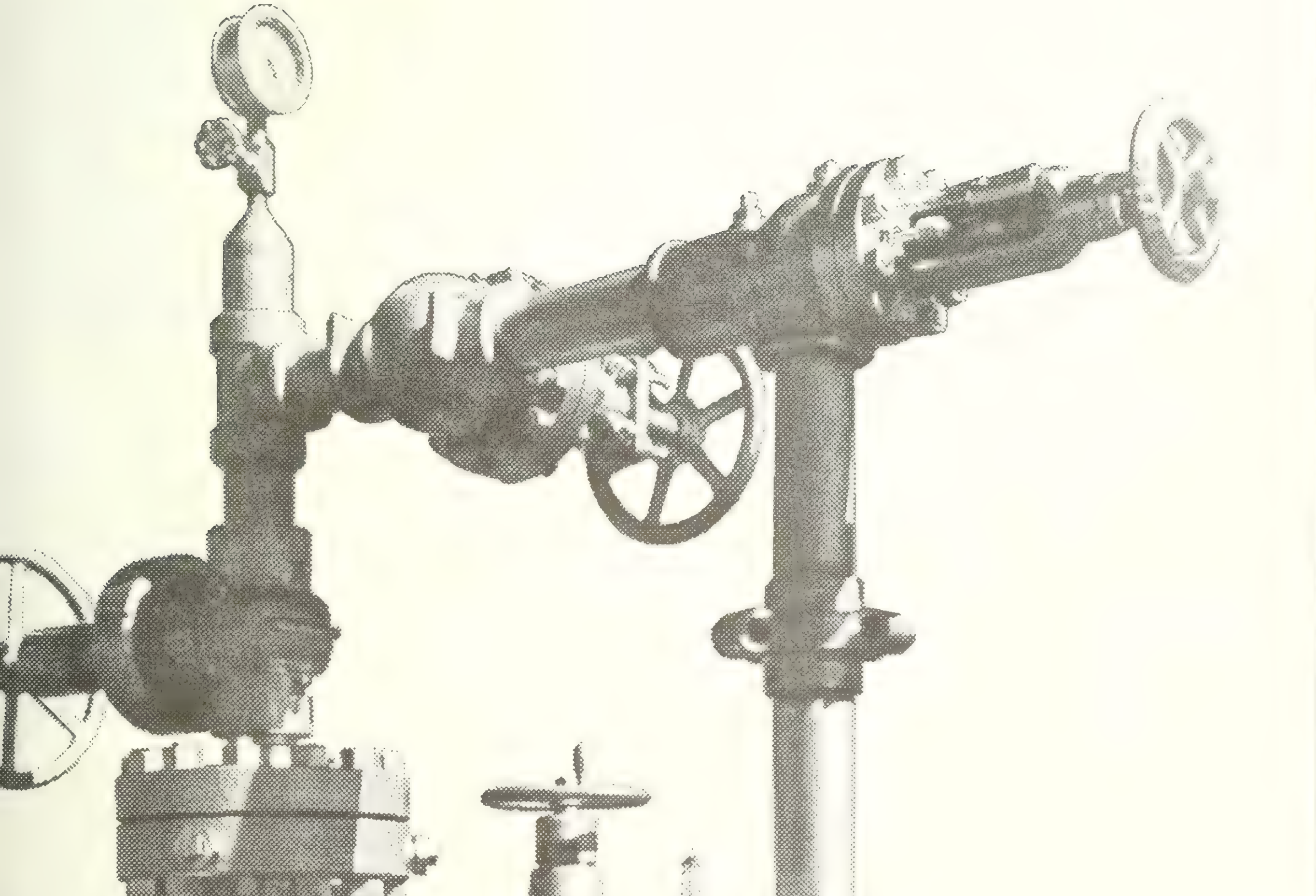


## Refining Districts



# Appendix B

## Explanatory Notes



# Appendix B

# Explanatory Notes

## ote 1: Data Collection Methodology

### ckground

e Petroleum Supply Reporting System (PSRS) represents a mily of data collection survey forms, data processing sys- ms and publication systems that have been consolidated to hieve comparability and consistency throughout. The sur- y forms that comprise the PSRS are:

| *orm umber* | *Name* |
|---|---|
| A-800 | Weekly Refinery Report |
| A-801 | Weekly Bulk Terminal Report |
| A-802 | Weekly Product Pipeline Report |
| A-803 | Weekly Crude Oil Stocks Report |
| A-804 | Weekly Imports Report |
| A-810 | Monthly Refinery Report |
| A-811 | Monthly Bulk Terminal Report |
| A-812 | Monthly Product Pipeline Report |
| A-813 | Monthly Crude Oil Report |
| A-814 | Monthly Imports Report |
| A-816 | Monthly Natural Gas Liquids Report |
| A-817 | Monthly Tanker and Barge Movement Report |
| A-820 | Annual Refinery Report |

rms EIA-800 through 804 comprise the Weekly Petroleum pply Reporting System (WPSRS). This system is designed collect weekly data on basic refinery operations and on ude oil and major petroleum products stocks and imports. ta from the WPSRS are published in the *Weekly Petroleum atus Report* (WPSR) and are also used to calculate the eliminary statistics in the "Summary Statistics" section of *Petroleum Supply Monthly* (PSM). A description of the PSRS survey forms follows in Explanatory Note 1.1.

rms EIA-810 through 814, 816, and 817 comprise the onthly Petroleum Supply Reporting System (MPSRS). ese surveys collect detailed refinery and natural gas plant erations data; refinery, bulk terminal, natural gas plant, and eline stocks data; crude oil and petroleum product imports ta; and data on movements of petroleum products and crude between Petroleum Administration for Defense (PAD) stricts. These surveys are the primary source of data for the "Summary Statistics" and "Detailed Statistics" sections of the PSM. A description of MPSRS survey forms follows in Explanatory Note 1.2.

Data are also obtained on magnetic tape from the Bureau of the Census on a monthly basis. These tapes contain aggregated import and export statistics that are used in the preparation of the PSM. A description of the Census data follows in Explanatory Note 1.3.

## Note 1.1: Weekly Petroleum Supply Reporting System (WPSRS)

### Background

The EIA first began publishing weekly petroleum supply statistics in April 1979 using data from an external source. Estimates from the EIA's weekly sample surveys (inaugurated in April 1979) replaced the estimates from the external source for all but the imports series in January 1980, and replaced the imports estimates in June 1980.

The weekly surveys collect data comparable to those collected on a monthly basis. Selected petroleum companies report weekly data to the EIA on crude oil and petroleum product stocks, refinery inputs and production, and crude oil and petroleum product imports. On Forms EIA-800 through EIA-803, companies report data on a custody basis. On the Form EIA-804, the importer of record reports all shipments entering the United States. Current weekly data and the most recent monthly data are used to estimate the totals that are published in the *Weekly Petroleum Status Report.*

### Sample Frame

The sample of companies that report weekly is selected from the universe of companies that report on the comparable monthly surveys. Sampled companies report data only for facilities in the 50 States and District of Columbia.

The sample for each survey is taken from the following universe:

**EIA-800**: Based on the EIA-810 universe which includes all petroleum refineries and blending plants located in the 50 States, District of Columbia, Puerto Rico, the Virgin Islands, and Guam. The selected sample size is 151.

**EIA-801**: Based on the EIA-811 universe which includes every bulk terminal operating in the 50 States, the District of Columbia, Puerto Rico, and the Virgin Islands. A bulk terminal is primarily used for storage and/or marketing of petroleum products and has a total bulk storage capacity of 50,000 barrels or more, and/or receives petroleum products by tanker, barge, or pipeline. Bulk terminal facilities associated with a product pipeline are included. The selected sample size is 68.

**EIA-802**: Based on the EIA-812 universe which includes all product pipeline companies that carry petroleum products (including interstate, intrastate, and intracompany pipelines) in the 50 States and the District of Columbia. The selected sample size is 41.

**EIA-803**: Based on the EIA-813 universe which includes companies that carry or store 1,000 barrels or more of crude oil. Included in this survey are gathering and trunk pipeline companies (including interstate, intrastate, and intracompany pipelines), crude oil producers, terminal operators, storers of crude oil (except refineries), and companies transporting Alaskan crude oil by water in the 50 States and the District of Columbia. The selected sample size is 79.

**EIA-804**: Based on the EIA-814 universe which covers each company, including subsidiary or affiliated companies, that import crude oil, unfinished oils, and finished petroleum products into the United States and Puerto Rico. The selected sample size is 82.

### Sampling Method

The sampling procedure used for the weekly system is the cut-off method. In the cut-off method, companies are ranked from largest to smallest on the basis of the quantities reported during some previous period. Companies are chosen for the sample beginning with the largest and adding companies until the total sample covers about 90 percent of the total for each item and each geographic region for which weekly data are published.

### Collection Methods

Data are collected by mail, mailgram, telephone, Telex, and Telefax on a weekly basis. The report period begins and ends each Friday at 7 a.m. All canvassed firms must file reports by 5 p.m. on the following Monday.

### Estimation and Imputation

After company reports have been checked and entered into
weekly data base, weekly totals for given products are e
mated by using the following formula.

The total reported by all companies for the most recent mor
($M_t$), is divided by the amount reported by the sample
companies for the most recent month, ($M_s$). The resul
multiplied by the amount reported by the sample of compar
for the current week, ($W_s$). The answer, $W_t$, is an estimat
the amount that would have been reported by all compar
for the current week if all companies reported each week

$$W_t = \frac{M_t}{M_s}\ (W_s)$$

This procedure is used to estimate total weekly refinery inp
and production.

To estimate stocks of finished products, the preceding pro
dure is followed separately for refineries, bulk terminals,
pipelines. Total estimates are formed by summing o
establishment types.

Weekly imports data are highly variable on a company-
company basis or a week-by-week basis. Therefore,
exponentially smoothed ratio has been developed. The e
mate of weekly imports is the sum of the smoothed ra
multiplied by the weekly values and estimates for shipme
from Puerto Rico. Imports of other oils includes an adjustm
from Census data for selected products because of cover
differences between the monthly imports data and Cen
data.

Explicit imputation is done for companies which do
respond in a given week. The imputed values are expon
tially smoothed means of recent reports from the spec
company.

### Response Rate

The response rate for the published estimates is usu
between 97 and 100 percent of the sampled respondents.

## Note 1.2: Monthly Petroleum Supp Reporting System (MPSRS)

### Background

The MPSRS was implemented in January 1983 as the resul
an extensive effort to integrate the collection and process
of petroleum supply data that have been collected on ot

rvey forms for many years. The collection of monthly
troleum supply statistics began as early as 1918 when the
ureau of Mines (BOM) began collecting data on refinery
erations and crude oil stocks and movements. The collec-
on systems were further expanded to include natural gas
ant liquids production and storage in 1925, imports of crude
and petroleum products and storage and movement of
troleum products in 1959, and tanker and barge movements
crude oil and petroleum products in 1964. Since their
ception, each survey has undergone numerous changes, but
MPSRS is the first effort to make them all consistent and
mparable.

### espondent Frame

**A-810**: All petroleum refineries and blending plants lo-
ed in the 50 States, District of Columbia, Puerto Rico, the
rgin Islands, and Guam. Approximately 260 respondents
port on the EIA-810.

**A-811**: Every bulk terminal operating in the 50 States, the
strict of Columbia, Puerto Rico, and the Virgin Islands. A
lk terminal is primarily used for storage and/or marketing of
roleum products and has a total bulk storage capacity of
,000 barrels or more, and/or receives petroleum products by
ker, barge, or pipeline. Bulk terminal facilities associated
th a product pipeline are included. Approximately 320
pondents report on the EIA-811.

**A-812**: All product pipeline companies that carry petro-
m products (including interstate, intrastate, and intracom-
y pipelines) in the 50 States and the District of Columbia.
proximately 90 respondents report on the EIA-812.

**A-813**: All companies which carry or store 1,000 barrels or
re of crude oil. Included in this survey are gathering and
nk pipeline companies (including interstate, intrastate, and
acompany pipelines), crude oil producers, terminal opera-
s, storers of crude oil (except refineries), and companies
nsporting Alaskan crude oil by water in the 50 States and
District of Columbia. Approximately 180 respondents
ort on the EIA-813.

**A-814**: All companies, including subsidiary or affiliated
npanies, that import crude oil, unfinished oils, and finished
roleum products into the United States and Puerto Rico.
proximately 1,500 respondents report on the EIA-814.

**A-816**: All facilities that extract liquid hydrocarbons from
atural gas stream (natural gas processing plant) and/or
arate a liquid hydrocarbon stream into its component
ducts (fractionator). Approximately 1,050 respondents
ort on the EIA-816.

**A-817**: All companies that have custody of crude oil or
roleum products transported by tanker or barge between PAD Districts or between the Panama Canal and the United States. For purposes of this report, custody is defined as physical possession of crude oil or petroleum products on a company owned tanker or barge. Also, companies which lease vessels or contract for the movement of crude oil or petroleum products on a tanker or barge between PAD Districts or between the Panama Canal and the United States are considered to have custody. Approximately 50 respondents report on the EIA-817.

EIA utilizes a number of sources and methods to maintain the survey respondent lists. On a regular basis, survey managers review industry publications such as the *Oil and Gas Journal* and *Oil Daily* for information on facilities or companies starting up or closing down operations. These sources are augmented by articles in newspapers, letters from respondents indicating changes in status and information received from survey systems operated by other offices.

Every three years an extensive survey is conducted to completely refresh the frames. This involves consolidating information from every known source including State agencies, Federal agencies (e.g., EPA, Corps of Engineers, Census Bureau, etc.), and private industry directories. The effort also includes the evaluation of the impact of potential frame changes on the historical time series of data published from these respondents. The results of this frame study are usually implemented in January to provide a full year under the same frame.

### Collection Methods

The data for all of the MPSRS surveys are collected monthly. Completed forms are required to be postmarked by the 20th calendar day following the end of the report month, with the exception of the EIA-814 which is due 15 work days following the end of the report month. Telephone follow-up calls are made to nonrespondents prior to the publication deadline, for their data. An automated mailing list is maintained and is used to monitor receipt of the forms.

### Imputing Missing Data

Imputation is performed for companies that do not respond to EIA Forms 810-813 and 816. For such companies, previous monthly values are used for current values. The previous month's ending stocks value is used for both the current month's beginning stocks and the current month's ending stocks. Data for nonrespondents on the EIA-814 and 817 are not imputed.

### Response Rate

The response rate is generally 99 to 100 percent by the time the data are first published. Nonrespondents are contacted in

writing and reminded of their requirement to report. Companies that file late or fail to file are subject to criminal fines, civil penalties, and other sanctions as provided by Section 13(i) of the FEA Act.

## Note 1.3: Census Import (IM-145) and Export (EM-522 and EM-594) Data

### Background

Each month the EIA purchases magnetic tapes of aggregated import and export statistics from the Bureau of the Census. These data tapes are the only source of export statistics and are used to augment the import data collected by the EIA.

### Import Statistics (IM-145)

### Coverage

Census import statistics used in the PSM reflect both government and nongovernment imports of merchandise from foreign countries and U.S. possessions into the United States (the 50 States and the District of Columbia) without regard to whether or not a commercial transaction is involved. The following types of transactions are excluded from the statistics:

1. Merchandise in-transit through the United States, when documented with Customs as an in-transit movement.
2. U.S. merchandise that was held in foreign countries by the U.S. Armed Forces and is returned to the United States for the use of the Armed Forces.

### Source of Import Information

The official U.S. import statistics are compiled by the Bureau of the Census from copies of the import entry and warehouse withdrawal forms that importers are required by law to file with Customs officials (Customs Forms 7501, 7505, and 7506).

### Country and Area of Origin

The country reported in the statistics as the country of origin is defined as the country where the merchandise was grown, mined, or manufactured. In instances where the country of origin cannot be determined, the transactions are credited to the country of shipment.

### Export Statistics (EM-522 and EM-594)

Census export statistics used in the PSM reflect both gov
ment and nongovernment exports of domestic and fore
merchandise from the United States (the 50 States and
District of Columbia) to foreign countries and U.S. pos
sions, without regard to whether or not the exportation
volves a commercial transaction. The following type
transactions are excluded from the statistics:

1. Merchandise shipped in-transit through the Un
States from one foreign country to another, when d
mented as such with U.S. Customs.
2. Bunker fuels and other supplies and equipment for
on departing vessels, planes, or other carriers engage
foreign trade.

### Source of Export Information

The official U.S. export statistics are compiled by the Bu
of the Census. Exporters are required to file export docum
with Customs officials (Customs Form 7525).

### Country and Area of Destination

The country of destination is defined as the country of ulti
destination or the country where the goods are to be
sumed, further processed, or manufactured, as known to
shipper at the time of exportation. If the shipper does not k
the country of ultimate destination, the shipment is credite
the last country to which the shipper knows that the merc
dise will be shipped in the same form as it was when expo

## Note 2: Supply

The components of petroleum supply are field product
refinery production, imports, and stock withdrawal or a
tion:

**Field Production** is the sum of crude oil production (inc
ing lease condensate), natural gas processing plant pro
tion, and new supply (field production) of other liquids
by refineries.

Crude oil production is estimated based on data received f
State conservation agencies. For further explanation,
Explanatory Note 3.

ield production of natural gas plant liquids (NGPL), includ-g finished petroleum products, is reported monthly on rvey Form EIA-816, *Monthly Natural Gas Liquids Report.* egative production will occur when the amount of a product roduced during the month is less than the amount of that same roduct that is reprocessed (input) or reclassified to become nother product during the same month. For survey descrip-ons and other details, see Explanatory Note 1.2.

**efinery Production** of petroleum products is reported onthly on survey Form EIA-810, *Monthly Refinery Report.* ublished production of these products equals refinery pro-ction minus refinery input. Refinery production of unfin-hed oils and of motor and aviation gasoline blending com-nents appears on a net basis under refinery input. Negative roduction will occur when the amount of a product produced ring the month is less than the amount of that same product at is reprocessed (input) or reclassified to become another oduct during the same month.

**nports** of crude oil and petroleum products are reported onthly on Form EIA-814, *Monthly Imports Report.* In ldition, imports of NGL's are obtained from the Census ureau Tabulation IM-145. The Census Bureau Tabulation M-145 summarizes import data from Customs import decla-tions reported on Customs Forms 7501, 7505, and 7506. dditional data taken from the IM-145 are relatively small uantities of naphtha-type and kerosene-type jet fuels, distil-te fuel oils, and residual fuel oils withdrawn from bonded orage for use in international trade. Even though these duty-ee fuels are stored on United States shores, they did not enter e United States for domestic consumption and therefore are t included in the Form EIA-814 reporting system.

**ock Withdrawal (+) or Addition (-)** is calculated by sub-acting stocks at the end of the month from stocks at the eginning of the same month. (Note: The beginning stocks one month are equal to the ending stocks of the previous onth.) A positive result (+) would represent a withdrawal om stocks. A negative result (-) would represent a buildup stocks. For a description of survey forms used to make ock withdrawal or addition calculations, see Explanatory ote 5.

**naccounted-for Crude Oil** is a balancing item that repre-nts the difference between crude oil supply and disposition. rude oil supply is the sum of field production, imports, and ock withdrawals. Crude oil disposition is the sum of exports, finery input, losses, stock additions, and product supplied. naccounted-for crude oil is calcuated by subtracting crude supply from crude oil disposition. A positive result dicates that refiners and exporters reported use of more ude oil than was reported to have been available to them. his occurs, for example, when imports are undercounted e to late reporting or other problems.) A negative result ould indicate that more crude oil was reported to have been pplied to refiners and exporters than they reported used.

## Note 3: Domestic Crude Oil Production

Data on crude oil production for States are reported to EIA by State conservation agencies. Data on the volume of oil produced on Federally-owned offshore leases are reported by the Minerals Management Service, U.S. Department of the Interior. All except five of the producing States report data monthly. These States are Michigan, New York, Ohio, Pennsylvania, and Virginia. Estimates of monthly production for these States are made using methodologies explained in the next paragraph. Reported and estimated monthly production volumes are updated as new data are received by EIA. After the end of each calendar year, the monthly numbers are updated further using the annual reports of the State conservation agencies and the Minerals Management Service.

Table 11 of this publication provides information on crude oil production for the most recent month for which State values are available. There is a time lag of approximately 4 months between the end of the reporting month and the time when the monthly State crude oil production data become available. In order to present more timely crude oil production values, the Energy Information Administration prepares a forecast estimate on the first day of the reference month and revised estimates approximately 75 days later which are based on historical production patterns and are summed to obtain national and Petroleum Administration for Defense District (PADD) level crude oil production values. The individual State level estimates are either exponential curve fitted projections based on recent data or are constant level projections based on the average production rate during a recent time period. The forecast estimates are published in the *Weekly Petroleum Status Report* and are also used to calculate the preliminary estimates in the "Summary Statistics" section of the *Petroleum Supply Monthly.*

These forecast estimates are then replaced by the revised estimates in the next issue of the *Petroleum Supply Monthly.*

Table B1 is intended to provide further insight into EIA's estimates of monthly U.S. crude oil production. It shows (a) how the aggregate reported State data evolves over a period of 18 months; (b) the number of producing States that have not reported production for a given month as of the most recent "Date of Data Availibility;" and (c) various EIA estimates of monthly crude oil production within that period:

- The original estimate is used in the *Petroleum Supply Monthly* Tables S1 and S2 until replaced by the interim estimate.

- The interim estimate is used in the *Petroleum Supply Monthly* Tables S1 and S2 until replaced by the final estimate.

- The initial estimate based upon data collected on Form EIA-182, *Domestic Crude Oil First Purchase Report*, is used in generating the interim estimate. The initial volume represents the best estimate available 40 days after the end of the reference month and includes imputation for nonresponse and possible reporting errors. The revised volume is the best estimate available 74 days after the reference month and includes imputation needed. A final revision is published concurrent wi publication of EIA-182 price data in the *Petrolei Marketing Annual.*

- The final estimate is used in the *Petroleum Supp Annual.*

**Table B1. U.S. Crude Oil[1] Production Estimates and Reported State[2] Data by Month**
(Thousand Barrels per Day)

| Date of Data Availability | 4-87 | 5-87 | 6-87 | 7-87 | 8-87 | 9-87 | 10-87 | 11-87 | 12-87 | 1-88 | 2-88 | 3-88 | 4-88 | 5-88 | 6-88 | 7-88 | 8-88 | 9-88 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Reported State Data[3] | | | | | | | | | | | | | | | | | |
| 5-14-87 | 0 | | | | | | | | | | | | | | | | | |
| 6-14-87 | 2057 | 0 | | | | | | | | | | | | | | | | |
| 7-14-87 | 4618 | 2068 | 0 | | | | | | | | | | | | | | | |
| 8-14-87 | 7615 | 4654 | 2012 | 0 | | | | | | | | | | | | | | |
| 9-14-87 | 8110 | 7218 | 4665 | 1999 | 0 | | | | | | | | | | | | | |
| 10-14-87 | 8288 | 8210 | 7672 | 4264 | 1997 | 0 | | | | | | | | | | | | |
| 11-14-87 | 8412 | 8211 | 8139 | 7276 | 2971 | 1945 | 0 | | | | | | | | | | | |
| 12-14-87 | 8411 | 8255 | 8140 | 7752 | 7724 | 5008 | 2088 | 0 | | | | | | | | | | |
| 1-14-88 | 8412 | 8255 | 8179 | 7756 | 7731 | 7252 | 4866 | 2152 | 0 | | | | | | | | | |
| 2-14-88 | 8412 | 8256 | 8191 | 8095 | 8034 | 8039 | 7703 | 5296 | 2127 | 0 | | | | | | | | |
| 3-14-88 | 8412 | 8256 | 8191 | 8095 | 8071 | 8039 | 8190 | 8205 | 3208 | 2086 | 0 | | | | | | | |
| 4-14-88 | 8377 | 8218 | 8157 | 8133 | 8093 | 8090 | 8249 | 8286 | 8204 | 5111 | 2161 | 0 | | | | | | |
| 5-14-88 | 8498 | 8336 | 8279 | 8251 | 8210 | 8205 | 8365 | 8401 | 8318 | 7156 | 5743 | 2151 | 0 | | | | | |
| 6-14-88 | 8498 | 8336 | 8279 | 8251 | 8210 | 8206 | 8365 | 8403 | 8318 | 8086 | 8103 | 5767 | 2095 | 0 | | | | |
| 7-14-88 | 8498 | 8336 | 8279 | 8251 | 8210 | 8206 | 8365 | 8403 | 8319 | 8079 | 8183 | 7270 | 2686 | 2087 | 0 | | | |
| 8-14-88 | 8500 | 8341 | 8282 | 8256 | 8212 | 8217 | 8379 | 8411 | 8330 | 8134 | 8198 | 8142 | 7188 | 4859 | 2051 | 0 | | |
| 9-14-88 | 8500 | 8341 | 8283 | 8257 | 8212 | 8217 | 8380 | 8412 | 8331 | 8134 | 8240 | 8142 | 8129 | 7968 | 5005 | 2032 | 0 | 0 |
| | Producing States Without Reported Monthly Production[4] | | | | | | | | | | | | | | | | | |
| 9-14-88 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 6 | 6 | 7 | 16 | 29 | 33 | 33 |

| Type of Estimate | 4-87 | 5-87 | 6-87 | 7-87 | 8-87 | 9-87 | 10-87 | 11-87 | 12-87 | 1-88 | 2-88 | 3-88 | 4-88 | 5-88 | 6-88 | 7-88 | 8-88 | 9-88 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Production Estimate | | | | | | | | | | | | | | | | | |
| Original[5] ......... | 8361 | 8296 | 8303 | 8287 | 8204 | 8162 | 8281 | 8283 | 8348 | 8395 | 8353 | 8306 | 8269 | 8240 | 8210 | 8189 | 8128 | 8147 |
| Interim[6] ........... | 8426 | 8305 | 8263 | 8242 | 8190 | 8190 | 8293 | 8330 | 8340 | 8245 | 8376 | 8347 | 8268 | 8203 | 8158 | 8059 | | |
| Form EIA-182 | | | | | | | | | | | | | | | | | | |
| Initial ................ | 8287 | 8149 | 8168 | 8078 | 8022 | 8110 | 8151 | 8162 | 8144 | 8017 | 8239 | 8138 | 8106 | 8009 | 8045 | 7853 | | |
| Revised ............. | 8306 | 8161 | 8178 | 8082 | 8032 | 8084 | 8153 | 8173 | 8180 | 8048 | 8206 | 8134 | 8099 | 8015 | 8060 | | | |
| Final[7] ................. | 8498 | 8336 | 8279 | 8251 | 8210 | 8205 | 8364 | 8397 | 8318 | | | | | | | | | |

[1] Includes lease condensate.

[2] Includes Federal offshore areas, Gulf of Mexico (PAD District III) and Pacific (PAD District V), as two separate reporting entities.

[3] Includes EIA prorated monthly production in 1987 (annual average of 115 thousand barrels per day) for four States (Michigan, New York, Ohio, and Pennsylvania) for which only annual State data are available.

[4] Michigan monthly production data (averaging roughly 65,000 barrels per day) from January through June 1987, reported in prior months, was excluded from the data reported as of 4-14-88. Michigan, New York, Ohio, and Pennsylvania are counted as having monthly reported data in 1987 after their annual reports were received. These data were first reported as of 5-14-88.

[5] Original estimates were made on the first of each month.

[6] Interim estimates were made 44 days after the end of the production month.

[7] Published in the *Petroleum Supply Annual* 1987 DOE/EIA 0340(87)/2.

## ote 4: Disposition

ıe components of petroleum disposition are crude oil losses, finery inputs, exports, and products supplied for domestic nsumption.

**rude Oil Losses** is the sum of crude oil losses at refineries ported for all refineries on Form EIA-810, *Monthly Refinery port.*

**efinery Inputs** of crude oil, natural gas plant liquids, and her liquids are reported monthly on survey Form EIA-810, *onthly Refinery Report.* Published inputs of unfinished oils d of motor and aviation gasoline blending components ual refinery input minus refinery output. Refinery inputs of ished petroleum products are reported on a net basis under finery production.

**ports** of crude oil and petroleum products are compiled om Census Bureau tabulations EM-522 and EM-594. ports include crude oil shipments to Puerto Rico, and the rgin Islands, which are obtained from refinery receipts ported on Form EIA-810, *Monthly Refinery Report,* by ineries located in these places.

**oduct Supplied** for each product is calculated by summing ld production plus refinery production, plus imports, plus ck withdrawal or minus stock addition, minus crude oil sses (plus net receipts when calculated on a PAD District sis), minus refinery input, minus exports. This formula sures that total disposition equals total supply.

oduct supplied indicates those quantities of petroleum oducts supplied for domestic consumption. Occasionally, result for a product is negative because total disposition of product exceeds total supply. Negative product supplied ıy occur for a number of reasons: (1) product reclassifica- n has not been reported; (2) data were misreported or ported late; (3) in the case of calculations on a PAD District sis, the figure for net receipts was inaccurate because the verage of interdistrict movements was incomplete; and (4) oducts such as gasoline blending components and unfin- ed oils have entered the primary supply channels with their oduction net having been reported, e.g., streams returned to ineries from petrochemical plants.

oduct supplied for crude oil is the sum of crude oil burned leases and by pipelines as fuel oil. These data are reported Form EIA-813, *Monthly Crude Oil Report.* Prior to ıuary 1983, crude oil burned on leases and by pipelines as el oil were reported as either distillate or residual fuel oil and luded in product supplied for these products.

## Note 5: Stocks

Primary stocks of crude oil are the sum of ending stocks reported monthly on Form EIA-810, *Monthly Refinery Report,* and on Form EIA-813, *Monthly Crude Oil Report.* Crude oil held in the Strategic Petroleum Reserve is included unless otherwise noted. Alaskan crude oil in-transit is also included. Primary stocks of petroleum products are summed from data reported on Form EIA-816, *Monthly Natural Gas Liquids Report,* Form EIA-810, *Monthly Refinery Report,* Form EIA-811, *Monthly Bulk Terminal Report,* and on Form EIA-812, *Monthly Product Pipeline Report.* Primary stocks of petroleum products do not include either secondary stocks held by dealers and jobbers or tertiary stocks held by consumers. For survey descriptions and other details, see Explanatory Note 1.2.

## Note 6: Average Stock Levels

The national inventory (stocks) graphs for total petroleum products, crude oil, motor gasoline, distillate fuel oil, residual oil, and liquefied petroleum gases, in this publication include features to assist in comparing current inventory levels with past inventory levels and minimum operating levels are described below.

The graphs displaying inventory levels of crude oil and petroleum products, crude oil, motor gasoline, distillate fuel oil, residual fuel oil, and liquefied petroleum gases, provide the reader with actual inventory data compared to an *average range* from the most recent 3-year period running from January through December or from July through June. The ranges are updated every six months in April and October. The 3-year period is adjusted by dropping the oldest 6 months and including the most recent 6 months. The ranges also reflect seasonal variation determined from a longer time period. The seasonal factors, which determine the shape of the upper and lower curves, are updated annually in October, using the most recent year's final monthly data.

The monthly seasonal factors are estimated by means of a seasonal adjustment technique developed at the Bureau of the Census (Census X-11). The seasonal factors are assumed to be stable (i.e., unchanging from year to year) and additive (i.e., the series is deseasonalized by subtracting the seasonal factor for the appropriate month from the report inventory levels). The intent of deseasonalization is to remove only annual variation from the data. Thus, a deseasonalized series would contain the same trends, cyclical components, and irregularities as the original data. The seasonal factors for distillate fuel oil, residual fuel oil, and liquefied petroleum gases, were derived using monthly data from 1979-1985.

After seasonal factors are derived, data from the most recent 3-year period (January-December or July-June) are deseasonalized. The average of the deseasonalized 36-month series determines the midpoint of the deseasonalized average band. The standard deviation of the deseasonalized 36-months is calculated adjusting for extreme data points. The upper curve of the average range is defined as the average plus the seasonal factors plus the standard deviation. The lower curve is defined as the average plus the seasonal factors minus the standard deviation. Thus, the width of the *average range* is twice the standard deviation.

## Note 7: Movements

Movements of crude oil between PAD Districts are reported on Form EIA-817, *Monthly Tanker and Barge Movement Report*, and on Form EIA-813, *Monthly Crude Oil Report*. Petroleum product movements are reported on Form EIA-817, *Monthly Tanker and Barge Movement Report*, and EIA-812, *Monthly Product Pipeline Report*. Net receipts is the difference between total movements into and total movements out of each PAD District by pipeline, tanker, and barge. For survey descriptions and other details, see Explanatory Note 1.2.

## Note 8: Preliminary Monthly Statistics

Weekly data (Forms EIA-800, 801, 802, 803, and 804) are used to estimate the most recent monthly values for the "Summary Statistics" section. Since some of the weekly reporting periods overlap two adjacent months, it is necessary to use weighting factors in the calculation of the monthly values.

To estimate crude oil and petroleum product imports, crude oil input to refineries and production of petroleum products for a specific month, the weekly estimates are weighted by the number of days of that month included in each week, then summed.

End-of-month stock levels of crude oil and the major products (motor gasoline, distillate fuel oil, and residual fuel oil) are calculated in a similar manner, but use only the two weekly reporting periods that cover the end-of-week stocks before and after the end of the month. The end-of-month stock level is calculated by first calculating the stock change between the two weeks. The daily stock change between the two end-of-week stock levels is then calculated. This number is multiplied by the weighting factor of the earlier of the two weeks (the week that covers the last day of the month of interest). This change is added to the earlier of the two end-of-week stock levels to estimate the end-of-month stock level.

Preliminary monthly estimates of domestic crude oil prod tion are calculated as described in Explanatory Note 3.

## Note 9: Notes on Tables

**Note 9.1 Crude Oil and Petroleum Products Overview** s tistics on the referenced line appear in Table 4 of the "Detai Statistics," except where noted.

- Crude Oil and Petroleum Products Stock Withdrawal or Addition (-), Petroleum Products Supplied, To Imports, Crude Oil Imports, Total Exports, and Crude Exports appear as labeled in Table 4. Total Producti and Crude Oil Production appear under Field Producti in Table 4.
- Natural Gas Plant Production is the sum of Natural C Liquids and Finished Petroleum Products Field Prod tion in Table 4.
- Petroleum Products Imports is the sum of Natural C Liquids and LRGs, Other Liquids, and Finished Pet leum Products Imports in Table 4.
- Total Crude Oil and Petroleum Products Ending Stoc appear in thousand barrels in Table 2.

**Note 9.2 Crude Oil Supply and Disposition.** statistics on referenced line appear in Table 1 of the "Detailed Statistic except where noted.

- Total Domestic Field Production, Alaskan Field Prod tion, SPR Imports, Other Imports (synonymous w Gross Imports Excl. SPR), SPR and Other Prima Stocks Withdrawal (+) or Addition (-), Unaccounted Crude Oil, Refinery Inputs, and Exports appear as label in Table 1.
- Crude Losses and Product Supplied appear as labeled Table 4.
- SPR Ending Stocks and Other Primary Ending Stoc (synonymous with stocks excluding SPR) appear thousand barrels in Table 1.
- Total Crude Oil Ending Stocks appear in thousand barr in Table 2.
- Total Imports appear in Table 4.

**Note 9.3 Finished Motor Gasoline Supply and Dispositi** statistics on the referenced line appear in Table 4 of t "Detailed Statistics," except where noted.

- Total Production is the sum of Field Production and Refinery Production in Table 4.

- Imports, Stock Withdrawal (+) or Addition (-), Exports, and Product Supplied appear as labeled in Table 4.

- Unleaded Percent of Total Product Supplied represents the ratio of finished unleaded motor gasoline product supplied to total finished motor gasoline product supplied, multiplied by 100 and rounded to the nearest tenth.

- Ending stocks are aggregated from ending stocks in thousand barrels in Table 2.

**te 9.4 Distillate and Residual Fuel Oil Supply and Dis- sition** statistics on the referenced lines appear in Table 4 of "Detailed Statistics," except where noted.

- Total Production is the sum of Field Production and Refinery Production in Table 4.

- Imports, Stock Withdrawal (+) or Addition (-), Exports, and Product Supplied appear as labeled in Table 4.

- Ending stocks appear in thousand barrels in Table 2.

**te 9.5 Liquefied Petroleum Gases Supply and Disposi- n** statistics represent the aggregation of statistics on ethane, ylene, propane, propylene, butane, butylene, and isobu- e. The statistics on the referenced line appear in Table 4 of "Detailed Statistics," except where noted.

- Total Production is the sum of Field Production and Refinery Production in Table 4.

- Imports, Stocks Withdrawal (+) or Addition (-), Refinery Inputs, Exports, and Product Supplied appear as labeled in Table 4.

- Ending stocks appear in thousand barrels in Table 2.

**te 9.6 Other Petroleum Products Supply and Disposi- n** statistics represent the aggregation of statistics on pen- es plus, other liquids, and all finished petroleum products ept finished motor gasoline, distillate fuel oil, residual fuel and liquefied petroleum gases. The statistics on the refer- ed line are aggregated from Table 4 of the "Detailed tistics," except where noted.

- Total production is the aggregated sum of Field Production and Refinery Production in Table 4.

- Imports, Stock Withdrawal (+) or Addition (-), Refinery Inputs, Exports, and Product Supplied are aggregated from Table 4.

- Ending stocks are aggregated from ending stocks in thousand barrels in Table 2.

**Note 9.7 Table 1. U.S. Petroleum Balance**

- Lines (1) through (3): Crude oil (including lease condensate) production for *Alaska, Lower 48 States*, and *Total U.S.* are calculated by calling the conservation agency in Alaska for Alaskan crude oil production during the month, estimating crude oil production in the United States (see Explanatory Note 3), and taking the difference to equal production in the Lower 48 States.

- Line (5): *SPR Imports* are reported on survey Form EIA-814.

- Line (12): *Total Other Sources* equals crude oil stock withdrawal (+) or addition (-) plus unaccounted for crude oil minus crude oil losses minus crude oil product supplied in Table 2.

- Line (14): Natural Gas Plant Liquids (NGPL) *Field Production* equals field production of natural gas liquids (NGL) plus field production of finished petroleum products in Table 2.

- Line (15): NGPL *Net Imports* equals the sum of the imports of pentanes plus minus the exports of pentanes plus in Table 2.

- Line (16): NGPL *Stock Withdrawal (+) or Addition (-)* is equal to the stock withdrawal (+) or addition (-) of pentanes plus in Table 2.

- Line (17): *Total NGPL Supply* equals the sum of lines (14), (15), and (16).

- Line (18): Other Liquids *Stock Withdrawal (+) or Addition (-)* equals the aggregate stock withdrawal (+) or addition (-) for other hydrocarbons and alcohol, unfinished oils, motor gasoline blending components, and aviation gasoline blending components in Table 2.

- Line (20): *Other Hydrocarbons and Alcohol New Supply* equals the field production of same in Table 2.

- Line (21): *Refinery Processing Gain* is a balancing item equal to total refinery production minus total refinery input in Table 2.

- Line (23): *Total Other Liquids* equals the sum of lines (18) through (22).

- Line (24): *Total Production of Products* equals crude oil input to refineries plus field production of natural gas

liquids and LRG and finished petroleum products; plus imports of pentanes plus; plus stock withdrawal (+) or addition (-) of pentanes plus; plus stock withdrawal (+) or addition (-) of other liquids; plus imports of other liquids; plus field production of other liquids; plus total refinery production; minus total refinery input; plus crude oil product supplied in Table 2.

- Line (25): *Gross Imports* of Refined Products equals imports of LPG plus imports of finished petroleum products in Table 2.
- Line (26): *Exports* of Refined Products equals exports of LPG plus exports of finished petroleum products in Table 2.
- Line (27): *Net Imports* of Refined Products equals the difference between lines (25) and (26).
- Line (28): *Total New Supply of Products* equals crude oil input to refineries plus field production of natural gas liquids and LRG and finished petroleum products; plus imports of pentanes plus; plus stock withdrawal (+) or addition (-) of pentanes plus; plus stock withdrawal (+) or addition (-) of other liquids; plus imports of other liquids; plus total field production of other liquids; plus total refinery production; minus total refinery input; minus crude oil product supplied plus imports of LPG and finished petroleum products; minus exports of LPG and finished petroleum products in Table 2.
- Line (29): *Refined Products Stock Withdrawal (+) or Addition (-)* equals the sum of stock withdrawal (+) or addition (-) for LPG and finished petroleum products in Table 2.
- Line (30): *Total Petroleum Products Supplied for Domestic Use* equals total products supplied in Table 2.
- Lines (31) through (34): Equal the respective products supplied in Table 2.
- Line (35): *Other Products Supplied* equals the sum of pentanes plus, aviation gasoline, naphtha-type jet fuel, kerosene-type jet fuel, naphtha <400 Deg. F. for petrochemical feedstock use, other oils >400 Deg. F. for petrochemical feedstock use, special naphthas, lubricants, waxes, petroleum coke, asphalt and road oil, still gas, unfinished oils, motor gasoline blending components, aviation gasoline blending components, and miscellaneous products supplied in Table 2.
- Line (37): *Total Product Supplied* is equal to total products supplied in Table 2.
- The sum of lines (38) and (39): Stocks of *Crude Oil and Lease Condensate (Excluding SPR)* and stocks held by the *Strategic Petroleum Reserve* equals ending stocks c crude oil in Table 2.
- Line (43): Stocks of *Finished Refined Products* equal the sum of liquefied petroleum gases and finished petroleum products stocks in Table 2.

## Note 10: New Stock Basis

In January 1975, 1981, and 1983, numerous respondents wer added to bulk terminal and pipeline surveys affecting subse quent stocks reported and stock withdrawal calculations Using the expanded coverage (new basis), the end-of-yea stocks, in million barrels, would have been:

- Crude Oil: 1982 - 645 (Total) and 351 (Other Primary
- Crude Oil and Petroleum Products: 1974 - 1,121; 1980 1,425; and 1982 - 1,462.
- Motor Gasoline: 1974 - 225; 1980 - 263; 1982 - 24 (Total) and 203 (Finished).
- Distillate Fuel Oil: 1974 - 224; 1980 - 205; and 1982 186.
- Residual Fuel Oil: 1974 - 75; 1980 - 91; and 1982 - 6
- Liquefied Petroleum Gases: 1974 - 113; 1980 - 128; an 1982 - 103.
- Other Petroleum Products: 1974 - 220; 1980 - 249; an 1982 - 259.
- Stock withdrawal calculations beginning in 1975, 198 and 1983 were made using new basis stock levels.

In January 1984, changes were made in the reporting c natural gas liquids. As a result, unfractionated stream, whic was formerly included in "Other Petroleum Products Suppl and Disposition" table in the "Summary Statistics," is no reported on a component basis (ethane, propane, norma butane, isobutane, and pentanes plus). Most of these stock will now appear in the "Liquefied Petroleum Gases Suppl and Disposition" table of the "Summary Statistics." Th change will affect stocks reported and stock withdrawals i each table. Under the new basis, end-of-year 1983 stocks, i million barrels, would have been:

- Liquefied Petroleum Gases: 1983 - 108.
- Other Petroleum Products: 1983 - 248.

## ote 11: Stocks of Alaskan Crude Oil

ocks of Alaskan crude oil in-transit were included for the st time in January 1981. The major impact of this change is the reporting of stock withdrawal calculations. Using the panded coverage (new basis), 1980 end-of-year stocks, in llion barrels, would have been 488 (Total) and 380 (Other mary).

## ote 12: 1981 Changes in Petroleum dustry Reporting

troleum statistics contained in this report for all years ough 1980 were developed using definitions, concepts, porting procedures, and aggregation methods that are con- tent with those developed by the U.S. Bureau of Mines. search conducted by the Energy Information Administra- n in 1979 and 1980 indicated that changes had occurred in petroleum industry that were not being adequately re- cted in EIA's reporting system.

A reporting forms, definitions, and procedures were modi- d beginning in January 1981 to describe industry operations re accurately. Unfortunately, empirical information is not ailable to precisely measure the data shortcomings through 80. However, estimates of the magnitudes of differences in major data series are described below to form a basis for mparing 1979, 1980, and 1981 data.

**otor Gasoline**

or to 1979, the EIA product-supplied series for motor soline was consistently about 2 percent lower than the deral Highway Administration (FHWA) gasoline-sales a series, which is derived from State tax receipts. The ference increased to about 3 percent in 1979 and 1980. ere were two primary causes for this growing difference. st, refinery operations, particularly the flows of unfinished s and the redesignation of some finished products, were not ing accurately described on the EIA survey forms. Second, arge amount of gasoline was being produced away from ineries at "downstream blending stations" to take advan- e of provisions in regulations governing the amount of lead t could be added. These blending stations were not report- gasoline production to the EIA until the data system was anged in January 1981.

antitative estimates of the magnitude of the difference in A's gasoline product supplied data in 1979 and 1980 have en made by the EIA and the American Petroleum Institute PI). The following table provides 1979 and 1980 data as blished in the *Petroleum Statement, Annual*, as well as EIA and API estimates of "recast" motor gasoline product supplied.

EIA recast estimates were based upon preliminary monthly information in the *Monthly Petroleum Statement*. The ranges displayed in the EIA column reflect uncertainty in the estimates. Also shown are the FHWA motor gasoline sales statistics for those years.

### Table B2. Finished Motor Gasoline Product Supplied
(Thousand Barrels per Day)

| | EIA Reported | API Recast | EIA Recast | FHWA[1] |
|---|---|---|---|---|
| 1979 ..... | 7,034 | 7,302 | 7,183-7,347 | 7,258 |
| 1980 ..... | 6,579 | 6,882 | 6,806-6,889 | 6,792 |

[1] FHWA gasoline statistics based on data from Federal Highway Administration, Estimate of Total Gasoline Use, Table MF-21A published October 1980 and September 1981. Aviation gasoline (Table MF-24) has been subtracted from FHWA product supplied quantities to make data comparable.

**Distillate and Residual Fuel Oil**

Distillate and residual fuel oil refinery production statistics through 1980 were adjusted to account for an imbalance between unfinished oil supply and disposition. The reported quantities of refinery inputs of unfinished oils typically exceed the available supply of unfinished oils. It has been assumed that this occurs when distillate and residual fuel oils produced by a refinery are shipped to another refinery, where it is treated as unfinished oil. This oil is then reprocessed rather than used or sold as distillate or residual fuel oil.

For many years (including 1980), the difference between unfinished oil disposition and supply was subtracted from distillate and residual fuel oil production to adjust for this discrepancy. Two-thirds of the difference was applied to distillate, and one-third to residual fuel oil.

Beginning in January 1981, this adjustment was discontinued because there was not sufficient empirical evidence to support it. The following table presents distillate and residual fuel oil refinery production in 1979 and 1980 as published (adjusted) and on the same basis as 1981 statistics (unadjusted) to permit comparison.

Adjusted distillate and residual fuel oil product supplied volumes differ from the unadjusted volumes by the same amounts as the adjusted and unadjusted production volumes.

## Table B3. Distillate and Residual Fuel Oil Production and Product Supplied
(Thousand Barrels per Day)

| | Adjusted Refinery Production | Unadjusted Refinery Production | Difference | Unadjusted Product Supplied |
|---|---|---|---|---|
| Distillate Fuel Oil | | | | |
| 1979 ............ | 3,152 | 3,169 | 16 | 3,327 |
| 1980 ............ | 2,661 | 2,764 | 103 | 2,969 |
| Residual Fuel Oil | | | | |
| 1979 ............ | 1,687 | 1,695 | 8 | 2,83 |
| 1980 ............ | 1,580 | 1,634 | 54 | 2,562 |

**Total Petroleum Products**

The imbalance between the supply and disposition of unfinished oils and gasoline blending components is included with other products (line 35) in the U.S. Petroleum Balance (Table 1). These imbalances are reported as negative product supplied in the Other Liquids section, Supply and Disposition Statistics (Table 2). Since these changes only involve redistribution of the volumes of gasoline, distillate and residual fuel oil, gasoline blending components, and unfinished oils, the total volume of petroleum products supplied remains unaffected by them.

## Note 13: Natural Gas Liquids Reporting Changes

Beginning in January 1984, a number of changes in the reporting of natural gas liquids (NGL) were implemented. The modified system reflects supply and disposition of NGL on a component, rather than product, basis.

From 1979 to 1983, the EIA collected and reported information on the supply and disposition of nine NGL products. Beginning with January 1984, NGL supply and disposition data were reported on a five component basis (see Table B4) to be consistent with record-keeping practices used by the industry. The following table shows the product category under the new and old basis. Four PSRS surveys were modified beginning in January 1984. They were:

EIA-810 *Monthly Refinery Report*
EIA-811 *Monthly Bulk Terminal Report*
EIA-812 *Monthly Product Pipeline Report*
EIA-816 *Monthly Natural Gas Liquids Report*

A fifth survey, the Form EIA-814, *Monthly Imports Report* (formerly Form ERA-60), was not modified. Adjustments are applied to NGL imports data to make them consistent with the revised reporting system (See Explanatory Note 14).

## Table B4. Product Basis vs. Component Basis Reporting

| | 1984 Component Basis | | | | |
|---|---|---|---|---|---|
| 1979-1983 Product Basis | Ethane | Propane | Normal Butane | Isobutane | Pentanes Plus |
| Ethane | • | | | | |
| Ethane-Propane Mixtures | • | • | | | |
| Propane | | • | | | |
| Butane-Propane Mixtures | | • | • | | |
| Butane | | | • | | |
| Isobutane | | | | • | |
| Unfractionated Stream | • | • | • | • | • |
| Natural Gasoline and Isopentane | | | | | • |
| Plant Condensate | | | | | • |

## Note 14: NGL Import/Export Algorithms

Beginning in January 1984, the Energy Information Administration (EIA) implemented changes in the reporting of natural gas liquids (NGL) supply data, moving from a nine product slate basis to a five-component slate basis that corresponds to industry record-keeping practices. Changes coul not be made to the import and export systems. Therefore, i order to allocate imports and exports of mixed NGL stream to individual component parts, the EIA developed a statistica algorithm.

**Imports**

The imports algorithm is based on information gathered fron the larger importers of NGL, who were asked to provid component analysis of the products they imported during th first six months of 1983. The percentages shown in th following table are derived from the weighted averages of th data provided by the importers.

**Exports**

The export algorithm is based on information gathered fron the larger exporters of NGL, who were asked to provide component analysis of the products they exported during 1983. The percentages shown in the following table are derived from the weighted averages of the data provided by the exporters. It was necessary to derive percentages by

## ıble B5. Algorithm for Allocating NGL Imports/Exports (Percent)

| | EIA Component Slate | | | | |
|---|---|---|---|---|---|
| | Ethane | Propane | Nomal Butane | Isobutane | Pentanes Plus |
| ɔort Product | | | | | |
| Natural Gasoline An Isopentane (EIA-814) | -- | -- | -- | -- | 100 |
| Plant Condensate (EIA-814) | -- | -- | -- | -- | 100 |
| Ethane (IM-145) | 100 | — | -- | -- | -- |
| Propane (IM-145) | -- | 100 | -- | -- | -- |
| Butane (IM-145) | -- | — | 65 | 35 | -- |
| Butane-Propane Mixtures (IM-145) | -- | 40 | 35 | 20 | 5 |
| Ethane-Propane Mixtures (IM-145) | 60 | 40 | -- | -- | -- |
| ɔort Product | | | | | |
| Ethane (All PAD Districts) | 100 | -- | | -- | -- |
| Propane (All PAD Districts) | -- | 100 | -- | -- | -- |
| Butane (All PAD Districts) | -- | -- | 100 | -- | -- |
| Mixed Streams | | | | | |
| PAD Districts I, IV, V | -- | 40 | 60 | -- | -- |
| PAD District II | 30 | 25 | 15 | 15 | 15 |
| PAD District III | -- | 80 | 20 | -- | -- |

troleum Administration for Defense (PAD) Districts of portation, due to the wide variation of components included the mixed streams.

## ote 15: Addition of Crude Oil Pipeline lovements Data

ginning in January 1985, inter-PAD District pipeline vements of crude oil were included in the PSM. Crude oil eline movements are used in the crude oil supply balance the PAD District level but do not affect National level tistics. As a result of including these movements, *Net ceipts* of crude oil and *Unaccounted for Crude Oil* at the D District level changed significantly. Also affected were de oil imports and unfinished oil imports at the PAD strict level which are provided by *PAD District of entry* ables 6-10) and by *PAD District of processing* (Tables 16-).

e tables in the PSM that were changed due to the inclusion inter-PAD District pipeline movements of crude oil are ed below.

- Tables 6-10, "PAD District I to V, Supply and Disposition of Crude Oil and Petroleum Products." 1985 crude oil imports and unfinished oil imports in Tables 6 through 10 are now reported at the *PAD District of entry* rather than at the *PAD District of processing*. *Net Receipts* now include movements by pipeline as well as by tanker and barge.
- Table 26, "Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, and Barge Between PAD Districts." The crude oil line includes movements by pipeline as well as by tanker and barge.
- Table 27, "Movements of Crude Oil and Petroleum Products by Pipeline Between PAD Districts." A line was added to report crude oil movements.
- Table 29, "Net Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, and Barge Between PAD Districts." The crude oil line includes net movements by pipeline as well as by tanker and barge.

## Note 16: 1986 Changes in Petroleum Industry Reporting

Beginning in January 1986, several changes to the Petroleum Supply Reporting System (PSRS) went into effect. These changes affected the frame of operators of petroleum facilities required to complete the monthly surveys in the PSRS and resulted in some changes to the tables presented in the *Petroleum Supply Monthly* (PSM).

### Changes in Survey Frames

As a result of frames maintenance activities, 39 respondents were added to the monthly survey frames. The following table shows the impact of the data reported by the new respondents on published data for production and stocks of major petroleum products.

## Table B6. Impact of New Respondents to December 1985 PSM Data

| Product | Refinery Production (thousand barrels per day) |  | Stocks[1] (thousand barrels) |  |
|---|---|---|---|---|
|  | Reported by New Respondents | Published U.S. Total | Reported by New Respondents | Published U.S. Total |
| Leaded Gasoline | 1.3 | 2,326 | 224 | 81,379 |
| Unleaded Gasoline | 0.6 | 4,323 | 276 | 108,422 |
| Distillate Fuel Oil | 0 | 3,174 | 1,217 | 143,911 |
| Residual Fuel Oil | 0 | 1,055 | 1,747 | 50,671 |
| NGL's & LRG's | 0 | 393 | 409 | 80,898 |
| Other Products | 0 | 3,302 | 1,413 | 239,158 |
| Crude Oil (excl. SPR) | -- | -- | 2,314 | 318,695 |

[1] Stocks as of December 31, 1985.

Also, beginning in January 1986, a major integrated petroleum company consolidated production and stocks reporting for some of its facilities. Data previously reported separately on Form EIA-811, *Monthly Bulk Terminal Report*, and on Form EIA-816, *Monthly Natural Gas Liquids Report* for two facilities have been combined with data reported for two refineries on Form EIA-810, *Monthly Refinery Report*. The primary impact of this reporting change is on Table 24, “Stocks of Crude Oil and Petroleum Products by PAD District,” which will show a decrease in natural gas liquids (NGL) stocks at bulk terminals and natural gas processing plants, and an increase in NGL stocks at refineries.

### Changes in Publication Tables

Several changes have been made to tables in the PSM either as a direct result of changes in reporting requirements or to improve the usefulness of the publication. These changes are:

- Table 13, “Refinery Input of Crude Oil and Petroleum Products by PAD District”
  - -Alaskan crude oil receipts are now shown separately.
- Table 14, “Refinery Production of Petroleum Products by PAD District”
  - -The “petrochemical feedstock use” and “other use” are no longer shown separately for still gas or for liquefied refinery gases.
- Tables 16 and 17, “Imports of Crude Oil and Petroleum Products by PAD District”
  - -Imports of unfinished oils are now separated into four categories: naphthas and lighter, kerosene and light gas oils, heavy gas oils, and residuum.
- Tables 18 and 19, “Imports of Crude Oil and Petroleu Products by Source”
  - -Countries formerly included in the categories “Othe Western Hemisphere” and “Other Eastern Hemisphere are shown individually.
- Table 24, “Stocks of Crude Oil and Petroleum Product by PAD District”
  - -The breakout between “petrochemical feedstock use and “other use” for each liquefied petroleum gas wa eliminated.

## Note 17: 1987 Changes in the Petroleu Supply Reporting System

Several changes to the Petroleum Supply Reporting Syste went into effect at the beginning of January 1987. Thes changes were made as part of the Energy Informatio Administration's (EIA's) continuing effort to provide pertinent, timely and consistent energy information.

### Changes in Data Collection and Reporting Systems

- Fresh feed input to catalytic cracking units, hydrocracking units and cokers were added to the Form EIA-810 *Monthly Refinery Report.*

### Changes in Publications

- The “Appalachian No. 2” Refining District has bee combined with the “Indiana, Illinois, Kentucky,” Refining District. This affects PSM Tables 12-15, 24, 30, and 31

- Fresh feed inputs to catalytic cracking units, hydrocracking units and cokers are included in Table 13, "Refinery Input of Crude Oil and Petroleum Products by PAD District."

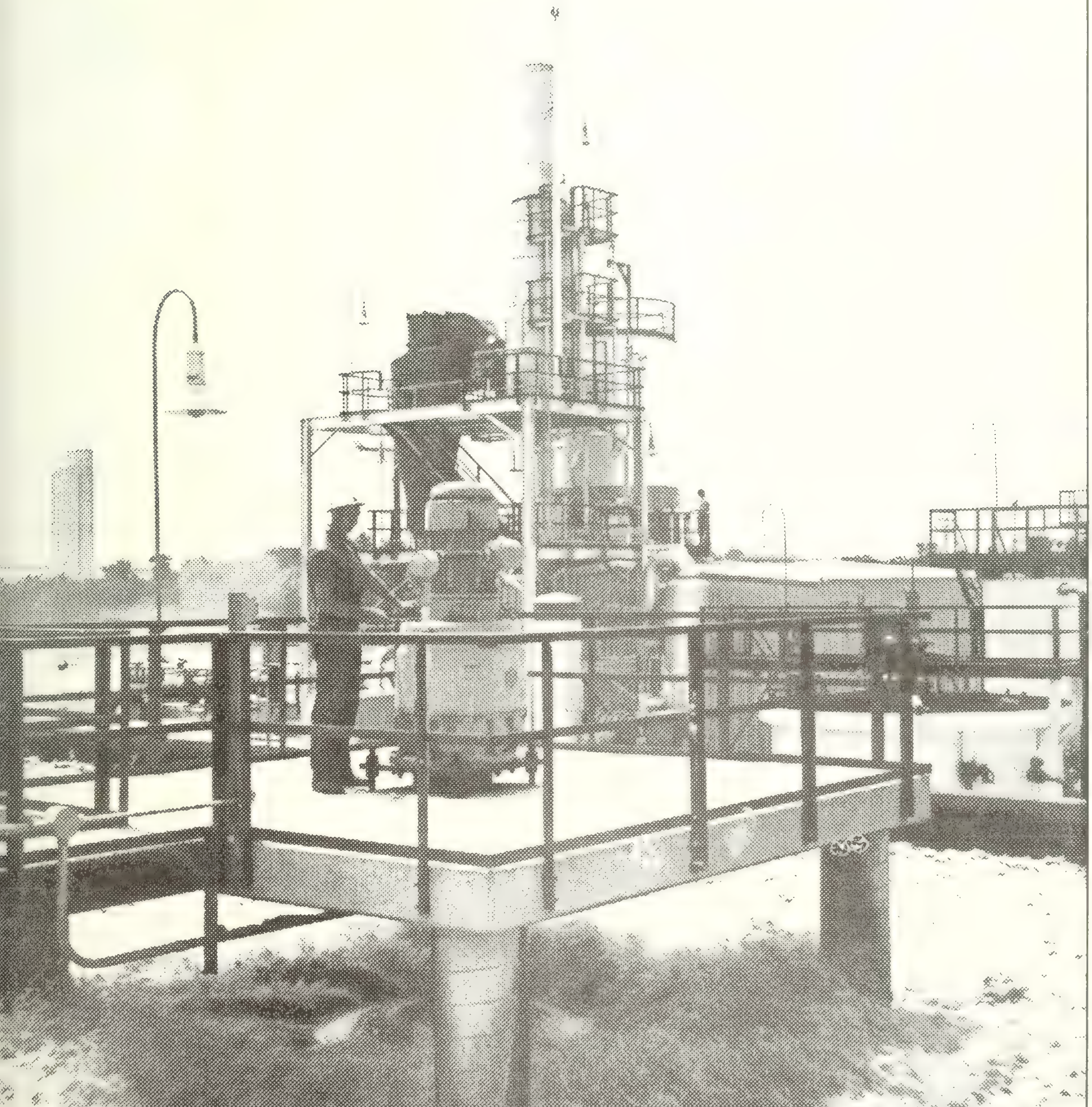
### larification

1986, several refineries and terminals in the United States plied for Foreign Trade Zone (FTZ) status and applications om three refineries were approved. Consequently, during 1986, some refineries with FTZ status were treated as if they were within the United States while the Hawaiian FTZ was considered outside.

- Effective with the January 1987 data, all Foreign Trade Zone facilities located within the 50 United States are considered domestic entities and are included in statistics in the PSM. The principal differences in the PSM data series are about a 1 percent increase in crude oil imports and a 3 percent decrease in product imports.

# Appendix C

## Impact of Resubmissions on Major Series, 1988



## able C1. Impact of Resubmissions on Major Series, 1988
(Thousand Barrels per Day, Except Where Noted)

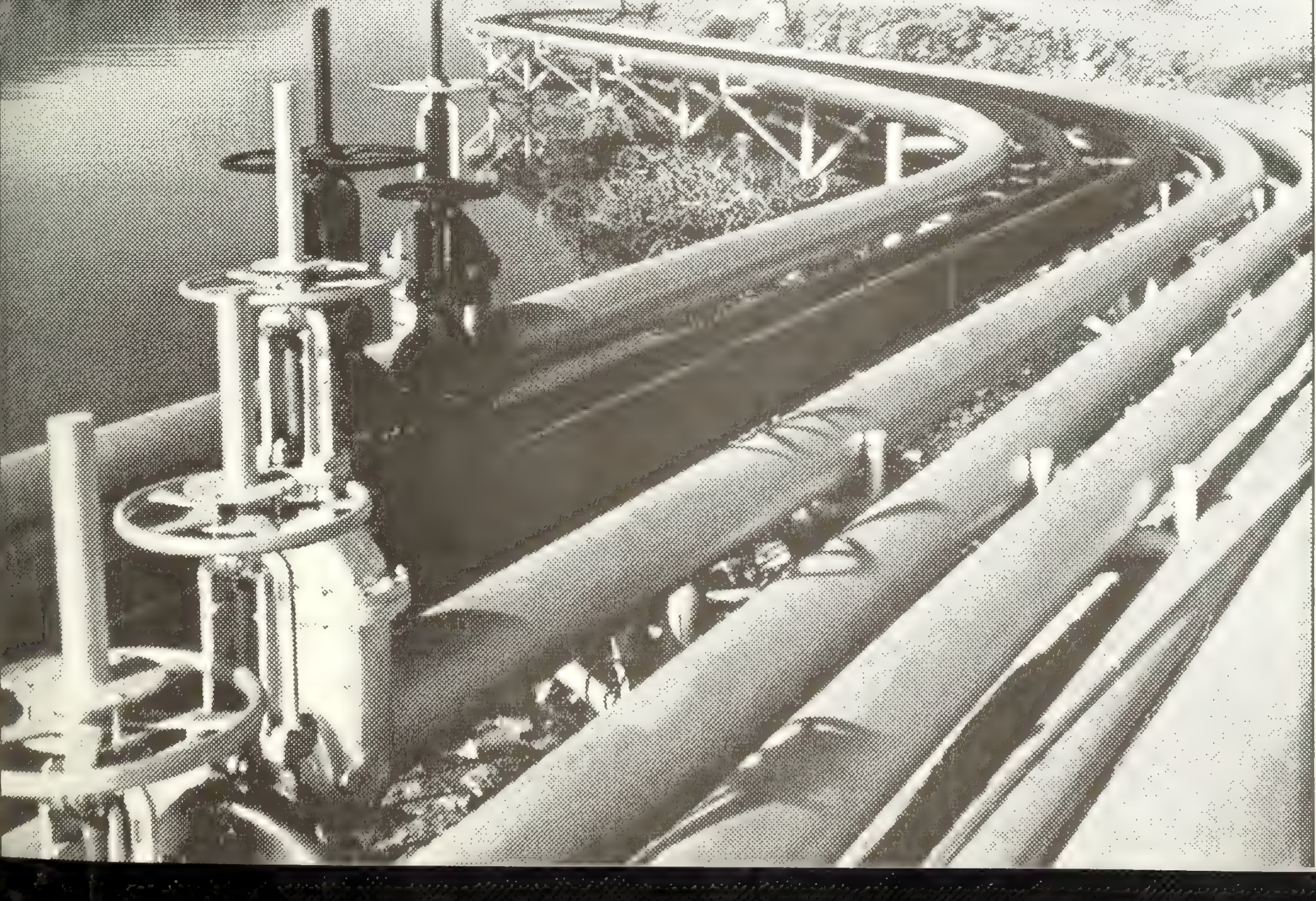
| | January | | February | | March | | April | | May | | June | | Year to Date |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Product | PSM Value | Difference | PSM Value | Difference | PSM Value | Difference | PSM Value | Difference | PSM Value | Difference | PSM Value | Difference | Average Difference |
| **uts** | | | | | | | | | | | | | |
| rude Oil | 12,975 | (s) | 12,715 | -20 | 13,072 | 8 | 13,167 | 0 | 13,472 | (s) | -- | -- | -2 |
| PG's | 366 | -8 | 336 | 7 | 266 | 2 | 256 | 1 | 253 | 2 | -- | -- | 0 |
| **duction** | | | | | | | | | | | | | |
| PG's | 1,723 | 5 | 1,757 | 9 | 1,802 | 10 | 1,796 | 8 | 1,809 | 2 | -- | -- | 6 |
| nished Motor Gasoline | 6,723 | 7 | 6,736 | (s) | 6,695 | 20 | 6,906 | 1 | 6,847 | 3 | -- | -- | 6 |
| aphtha-Type Jet Fuel | 184 | (s) | 178 | (s) | 209 | 2 | 203 | 0 | 229 | (s) | -- | -- | (s) |
| erosene-Type Jet Fuel | 1,231 | 1 | 1,205 | 1 | 1,243 | 0 | 1,088 | 0 | 1,060 | 0 | -- | -- | (s) |
| erosene | 104 | 0 | 118 | (s) | 68 | (s) | 50 | 0 | 48 | 0 | -- | -- | (s) |
| istillate Fuel Oil | 3,008 | (s) | 2,683 | -9 | 2,720 | -10 | 2,869 | (s) | 2,931 | (s) | -- | -- | -3 |
| esidual Fuel Oil | 1,009 | (s) | 997 | -6 | 944 | (s) | 951 | -3 | 866 | (s) | -- | -- | -1 |
| **ports** | | | | | | | | | | | | | |
| rude Oil | 4,619 | 50 | 4,692 | 27 | 4,788 | 96 | 5,126 | 10 | 5,234 | 0 | -- | -- | 36 |
| nished Motor Gasoline | 324 | 0 | 365 | (s) | 318 | 0 | 349 | 0 | 415 | 0 | -- | -- | (s) |
| aphtha-Type Jet Fuel | 3 | 0 | 3 | 0 | 2 | 0 | 3 | 0 | 4 | 0 | -- | -- | 0 |
| erosene-Type Jet Fuel | 80 | 0 | 64 | 4 | 95 | 0 | 83 | -2 | 101 | 0 | -- | -- | (s) |
| istillate Fuel Oil | 355 | (s) | 330 | 8 | 243 | -2 | 208 | (s) | 228 | 0 | -- | -- | 1 |
| esidual Fuel Oil | 737 | 22 | 792 | 30 | 610 | 14 | 465 | 9 | 423 | 0 | -- | -- | 15 |
| ther Products | 556 | 3 | 503 | 2 | 506 | 14 | 611 | 11 | 647 | 0 | -- | -- | 6 |
| **cks (Thousand Barrels)** | | | | | | | | | | | | | |
| rude Oil | 345,479 | 133 | 347,835 | 123 | 353,625 | 131 | 357,131 | 17 | 357,724 | 1,598 | -- | -- | 400 |
| nfinished Oils | 95,338 | 0 | 97,786 | 41 | 102,134 | 4 | 102,847 | 0 | 112,069 | -2 | -- | -- | 8 |
| PG's | 80,741 | -1,288 | 70,191 | 150 | 68,808 | 171 | 79,671 | 37 | 89,992 | 105 | -- | -- | -165 |
| otal Motor Gasoline | 239,464 | 456 | 240,661 | -33 | 231,258 | 47 | 225,956 | 202 | 225,644 | 114 | -- | -- | 157 |
| aphtha-Type Jet Fuel | 8,366 | -170 | 6,731 | -131 | 7,156 | 14 | 6,713 | 0 | 7,397 | -2 | -- | -- | -57 |
| erosene-Type Jet Fuel | 37,912 | 84 | 36,889 | 68 | 39,548 | 49 | 39,270 | 42 | 39,392 | 125 | -- | -- | 73 |
| istillate Fuel Oil | 127,155 | 433 | 109,640 | 237 | 89,312 | -108 | 94,290 | 4 | 104,452 | -118 | -- | -- | 89 |
| esidual Fuel Oil | 46,628 | -56 | 45,465 | -63 | 44,057 | 4 | 43,245 | -77 | 45,746 | 591 | -- | -- | 79 |
| **duct Supplied** | | | | | | | | | | | | | |
| PG's | 2,069 | 54 | 1,982 | -50 | 1,710 | 8 | 1,339 | 12 | 1,350 | -3 | -- | -- | 4 |
| nished Motor Gasoline | 6,679 | -6 | 7,004 | 17 | 7,265 | 17 | 7,384 | (s) | 7,269 | 5 | -- | -- | 6 |
| aphtha-Type Jet Fuel | 173 | 6 | 237 | -1 | 197 | -3 | 221 | (s) | 208 | (s) | -- | -- | (s) |
| erosene-Type Jet Fuel | 1,360 | -2 | 1,270 | 5 | 1,200 | 1 | 1,167 | -2 | 1,153 | -3 | -- | -- | s |
| istillate Fuel Oil | 3,517 | -14 | 3,511 | 6 | 3,544 | (s) | 2,870 | -4 | 2,757 | 4 | -- | -- | -1 |
| esidual Fuel Oil | 1,578 | 24 | 1,601 | 25 | 1,434 | 11 | 1,272 | 9 | 945 | -21 | -- | -- | 9 |
| ajor Products Supplied | 15,376 | 63 | 15,605 | 1 | 15,350 | 34 | 14,253 | 15 | 13,682 | -18 | -- | -- | 19 |

te: Volumes indicate cumulative changes resulting from resubmissions received for that month as of the date of this publication.
= Less than 500 barrels per day.

This table contains information on revisions to published statistics caused by resubmission of respondent survey forms. The table shows the published value in the *Petroleum Supply Monthly* (PSM) and the cumulative difference resulting from resubmissions for the major product series. The official published petroleum supply statistics are not changed to reflect revisions until publication of the *Petroleum Supply Annual* (PSA), except in cases of catastrophic error.

This table is provided as a service to analysts who need to know the latest available statistics. It should be used with caution because resubmissions are received on an irregular basis and the impact on published data can change from month to month. In some cases, the pattern of revision caused by resubmissions during the year is a poor indicator of final statistics that will be published in the PSA.

# Glossary



# Definitions of Petroleum Products and Other Terms

***lcohol.*** The family name of a group of organic chemical ompounds composed of carbon, hydrogen, and oxygen. he series of molecules vary in chain length and are comosed of a hydrocarbon plus a hydroxyl group; CH-(CH)n-H (e.g., methanol, ethanol, and tertiary butyl alcohol TBA)).

***lkylation.*** A refining process for chemically combining sobutane with olefin hydrocarbons (e.g., propylene, butyene) through the control of temperature and pressure in the resence of an acid catalyst, usually sulfuric acid or hyrofluoric acid. The product, alkylate, an isoparaffin, has igh octane value and is blended with motor and aviation asoline to improve the antiknock value of the fuel.

***PI Gravity.*** An arbitrary scale expressing the gravity or ensity of liquid petroleum products. The measuring scale calibrated in terms of degrees API; it may be calculated in erms of the following formula:

$$\text{Degrees API} = \frac{141.5}{sp.gr. 60\,°F/60\,°F} - 131.5$$

***romatics.*** Hydrocarbons characterized by unsaturated ing structures of carbon atoms. Commercial petroleum romatics are benzene, toluene, and xylene (BTX).

***sphalt.*** A dark-brown-to-black cement-like material conaining bitumens as the predominant constituents, obtained y petroleum processing. The definition includes crude sphalt as well as the following finished products: cements, luxes, the asphalt content of emulsions (exclusive of water), nd petroleum distillates blended with asphalt to make cutack asphalts. The conversion factor for asphalt is 5.5 arrels of 42 U.S. gallons per short ton.

***STM.*** The acronym for the American Society for Testing nd Materials.

***viation Gasoline (Finished).*** All special grades of gasone for use in aviation reciprocating engines, as given in STM Specification D910 and Military Specification MIL-5572. Excludes blending components which will be used blending or compounding into finished aviation gasoline.

***Aviation Gasoline Blending Components.*** Naphthas which will be used for blending or compounding into finished aviation gasoline (e.g., straight-run gasoline, alkylate, and reformate). Excludes oxygenates (alcohols, ethers), butane, and pentanes plus.

***Barrel.*** A volumetric unit of measure for crude oil and petroleum products equivalent to 42 U.S. gallons. This measure is used in most statistical reports. Factors for converting petroleum coke, asphalt, still gas and wax to barrels are given in the definitions of these products.

***Barrels Per Calendar Day.*** The maximum number of barrels of input that can be processed during a 24-hour period after making allowances for the following limitations:

> the capability of downstream facilities to absorb the output of crude oil processing facilities of a given refinery. No reduction is made when a planned distribution of intermediate streams through other than downstream facilities is part of a refinery's normal operation;
>
> the types and grades of inputs to be processed;
>
> the types and grades of products expected to be manufactured;
>
> the environmental constraints associated with refinery operations;
>
> the reduction of capacity for scheduled downtime such as routine inspection, mechanical problems, maintenance, repairs, and turnaround; and
>
> the reduction of capacity for unscheduled downtime such as mechanical problems, repairs, and slowdowns.

***Barrels Per Stream Day.*** The amount a unit can process running at full capacity under optimal crude oil and product slate conditions.

***Benzene.*** An aromatic hydrocarbon, ($C_6H_6$), present to a minor degree in most crude oils. Some important products manufactured from benzene are: styrene, phenol, nylon, aniline, and synthetic detergents.

***Butane.*** A normally gaseous straight-chain or branch-chain hydrocarbon, ($C_4H_{10}$). It is extracted from natural gas or refinery gas streams. It includes isobutane and normal butane and is designated in ASTM Specification D1835 and Gas Processors Association Specifications for commercial butane.

> ***Isobutane.*** A normally gaseous branch-chain hydrocarbon, ($C_4H_{10}$). It is a colorless paraffinic gas that boils at a temperature of 10.9 degrees F. It is extracted from natural gas or refinery gas streams.

> ***Normal Butane.*** A normally gaseous straight-chain hydrocarbon, ($C_4H_{10}$). It is a colorless paraffinic gas that boils at a temperature of 31.1 degrees F. It is extracted from natural gas or refinery gas streams.

***Butylene.*** An olefinic hydrocarbon, ($C_4H_8$), recovered from refinery processes.

***Catalytic Cracking.*** The refining process of breaking down the larger, heavier, and more complex hydrocarbon molecules into simpler and lighter molecules. Catalytic cracking is accomplished by the use of a catalytic agent and is an effective process for increasing the yield of gasoline from crude oil. Catalytic cracking processes fresh feeds and recycled feeds.

> ***Fresh Feeds.*** Crude oil or petroleum distillates which are being fed to processing units for the first time.

> ***Recycled Feeds.*** Feeds that are continuously fed back for additional processing.

***Catalytic Hydrocracking.*** A refining process that uses hydrogen and catalysts with relatively low temperatures and high pressures for converting middle boiling or residual material to high-octane gasoline, reformer charge stock, jet fuel and/or high grade fuel oil. The process uses one or more catalysts, depending upon product output, and can handle high sulfur feedstocks without prior desulfurization.

***Catalytic Hydrotreating.*** A refining process for treating petroleum fractions from atmospheric or vacuum distillation units (e.g., naphthas, middle distillates, reformer feeds, residual fuel oil, and heavy gas oil) and other petroleum (e.g., cat cracked naphtha, coker naphtha, gas oil, etc.) in the presence of catalysts and substantial quantities of hydrogen. Hydrotreating includes desulfurization, removal of substances (e.g., nitrogen compounds) that deactivate catalysts, conversion of olefins to paraffins to reduce gum formation in gasoline, and other processes to upgrade the quality of the fractions.

***Catalytic Reforming.*** A refining process using controlled heat and pressure with catalysts to rearrange certain hydrocarbon molecules, thereby converting paraffinic an naphthenic type hydrocarbons (e.g., low-octane gasolin boiling range fractions) into petrochemical feedstocks an higher octane stocks suitable for blending into finished gasoline. Catalytic reforming is reported in two categories. The are:

> ***Low Pressure.*** A processing unit operating at less tha 225 pounds per square inch gauge (PSIG) measured a the outlet separator.

> ***High Pressure.*** A processing unit operating at eithe equal to or greater than 225 pounds per square inc gauge (PSIG) measured at the outlet separator.

***Charge Capacity.*** The input (feed) capacity of the refiner processing facilities.

***Coal.*** A generic term applied to carbonaceous rocks tha were formed by the partial or complete decomposition o vegetation. These stratified carbonaceous rocks are eithe solid or brittle and are highly combustible. Includes lignite bituminous coal, and anthracite which conform to AST Specification D388.

***Crude Distillation.*** The refining process of separatin crude oil components at atmospheric pressure by heating t temperatures of about 600 degrees F to 750 degrees F (depending on the nature of the crude oil and desired products and subsequent condensing of the fractions by cooling.

***Crude Oil (including Lease Condensate).*** A mixture o hydrocarbons that existed in liquid phase in undergroun reservoirs and remains liquid at atmospheric pressure afte passing through surface-separating facilities. Included ar lease condensate and liquid hydrocarbons produced from ta sands, gilsonite, and oil shale. Drip gases are also included but topped crude oil (residual oil) and other unfinished oil are excluded. Liquids produced at natural gas processin plants and mixed with crude oil are likewise excluded wher identifiable. Crude oil is considered as either domestic o foreign, according to the following:

> ***Domestic.*** Crude oil produced in the United States o from its "outer continental shelf" as defined in 43 US 1331.

> ***Foreign.*** Crude oil produced outside the United States Imported Athabasca hydrocarbons are included.

***Delayed Coking.*** A process by which heavier crude oil ractions can be thermally decomposed under conditions of levated temperatures and pressure to produce a mixture of ighter oils and petroleum coke. The light oils can be processed further in other refinery units to meet product specifiations. The coke can be used either as a fuel or in other aplications such as the manufacturing of steel or aluminum.

***Distillate Fuel Oil.*** A general classification for one of the etroleum fractions produced in conventional distillation perations. It is used primarily for space heating, on-and-ff-highway diesel engine fuel including railroad engine uel and fuel for agricultural machinery), and electric power eneration. Included are products known as No. 1, No. 2, nd No. 4 fuel oils; No. 1, No. 2, and No. 4 diesel fuels.

***No. 1 Fuel Oil .*** A light distillate fuel oil intended for use in vaporizing pot-type burners. ASTM Specification D396 specifies for this grade maximum distillation temperatures of 400 degrees F at the 10-percent recovery point and 550 degrees F at the 90-percent point, and kinematic viscosities between 1.4 and 2.2 centistokes at 100 degrees F.

***No. 2 Fuel Oil.*** A distillate fuel oil for use in atomizing-type burners for domestic heating or for moderate capacity commercial-industrial burner units. ASTM Specification D396 designates minimum and maximum distillation temperatures at the 90-percent recovery point of 540 degrees F and 640 degrees F, and kinematic viscosities between 2.0 and 3.6 centistokes at 100 degrees F.

***No. 1 and No. 2 Diesel Fuel Oils.*** Distillate fuel oils used in compression-ignition engines, as designated in the ASTM Specification D975:

***No. 1-D.*** A volatile distillate fuel oil with a maximum distillation temperature of 550 degrees F at the 90-percent recovery point for use in high-speed diesel engines generally operated under variations in speed and load. Includes type C-B diesel fuel used for city buses and similar operations. Properties are defined in ASTM Specification D975.

***No. 2-D.*** A gas oil type distillate of lower volatility with minimum and maximum distillation temperatures at the 90-percent recovery point of 540 and 640 degrees F for use in high-speed diesel engines generally operated under uniform speed and load conditions. Includes Type R-R diesel fuel used for railroad locomotive engines, and Type T-T for diesel-engine trucks. Properties are defined in ASTM Specification D975.

***No. 4 Fuel Oil.*** A fuel oil for commercial burner installations not equipped with preheating facilities. It is used extensively in industrial plants. This grade is a blend of distillate fuel oil and residual fuel oil stocks that conforms to ASTM Specification D396 or Federal Specification VV-F-815C; with minimum and maximum kinematic viscosities between 5.8 and 26.4 centistokes at 100 degrees F. Also included is No. 4-D, a fuel oil for low and medium-speed diesel engines that conforms to ASTM Specification D975.

***Eastern Hemisphere.*** That half of the earth east of the Atlantic Ocean which includes Europe, Asia, Africa and Australia. The Hawaiian Foreign Trade Zone is in this hemisphere.

***Electricity (Purchased).*** Electricity purchased for refinery operations that is not produced within the refinery complex.

***Ethane.*** A normally gaseous straight-chain hydrocarbon, (C2H6). It is a colorless paraffinic gas that boils at a temperature of -127.48 degrees F. It is extracted from natural gas and refinery gas streams.

***Ether.*** A generic term applied to a group of organic chemical compounds composed of carbon, hydrogen, and oxygen, characterized by an oxygen atom attached to two carbon atoms (e.g., methyl tertiary butyl ether).

***Ethylene.*** An olefinic hydrocarbon, (C2H4), recovered from refinery processes or petrochemical processes.

***Exports.*** Shipments of goods from the 50 States and the District of Columbia to foreign countries, Puerto Rico, the Virgin Islands and other U.S. possessions and territories.

***Field Production.*** Represents crude oil production on leases, natural gas liquids production at natural gas processing plants, and new supply of other hydrocarbons and alcohol.

***Flexicoking.*** A thermal cracking process which converts heavy hydrocarbons such as crude oil, tar sands bitumen, and distillation residues into light hydrocarbons. Feedstocks can be any pumpable hydrocarbons including those containing high concentrations of sulfur and metals.

***Fluid Coking.*** A thermal cracking process utilizing the fluidized-solids technique to remove carbon (coke) for continuous conversion of heavy, low-grade oils into lighter products.

***Fuels Solvent Deasphalting.*** A refining process for removing asphalt compounds from petroleum fractions, such as reduced crude oil. The recovered stream from this process is used to produce fuel products.

***Gas Oil.*** A liquid petroleum distillate having a viscosity intermediate between that of kerosene and lubricating oil. It derives its name from having originally been used in the manufacture of illuminating gas. It is now used to produce distillate fuel oils and gasoline.

***Gasohol. See Motor Gasoline (Finished).***

***Gasoline Blending Components.*** Naphthas which will be used for blending or compounding into finished aviation or motor gasoline (e.g., straight-run gasoline, alkylate, and reformate). Excludes oxygenates (alcohols, ethers), butane, and pentanes plus.

***Heavy Gas Oil.*** Petroleum distillates with an approximate boiling range from 651 degrees F to 1000 degrees F.

***Hydrogen.*** The lightest of all gases, occurring chiefly in combination with oxygen in water; also in acids, bases, alcohols, petroleum, and other hydrocarbons.

***Idle Capacity.*** The component of operable capacity that is not in operation and not under active repair, but capable of being placed in operation within 30 days; and capacity not in operation but under active repair that can be completed within 90 days.

***Imported Crude Oil Burned As Fuel.*** The amount of foreign crude oil burned as a fuel oil, usually as residual fuel oil, without being processed as such. Imported crude oil burned as fuel includes lease condensate and liquid hydrocarbons produced from tar sand oil, gilsonite, and shale oil.

***Imports.*** Receipts of goods into the 50 States and the District of Columbia from foreign countries, Puerto Rico, the Virgin Islands, and other U.S. possessions and territories.

***Isobutane. See Butane.***

***Isohexane.*** A saturated branch-chain hydrocarbon, ($C_6H_{14}$). It is a colorless liquid that boils at a temperature of 156.2 degrees F.

***Isomerization.*** A refining process which alters the fundamental arrangement of atoms in the molecule without adding or removing anything from the original material. Used to convert normal butane into isobutane, (C4), an alkylation process feedstock, and normal pentane and hexane into isopentane, (C5), and isohexane, (C6), high-octane gasoli components.

***Isopentane. See Natural Gasoline and Isopentane.***

***Kerosene.*** A petroleum distillate that has a maximu distillation temperature of 401 degrees F at the 10-perce recovery point, a final boiling point of 572 degrees F, anc minimum flash point of 100 degrees F. Included are the tv grades designated in ASTM D3699: No. 1-K and No. 2- and all grades of kerosene called range or stove oil. Ker sene is used in space heaters, cook stoves, and water heate and is suitable for use as an illuminant when burned in wi lamps.

***Kerosene-type Jet Fuel.*** A quality kerosene product wit maximum distillation temperature of 400 degrees F at t 10-percent recovery point and a final maximum boili point of 572 degrees F. The fuel is designated in AST Specification D1655 and Military Specification MIL- 5624L (Grades JP-5 and JP-8). A relatively low-freezi point distillate of the kerosene type used primarily f commercial turbojet and turboprop aircraft engines.

***Lease Condensate.*** A natural gas liquid recovered from g well gas (associated and non-associated) in lease separato or natural gas field facilities. Lease condensate consis primarily of pentanes and heavier hydrocarbons.

***Light Gas Oils.*** Liquid petroleum distillates heavier th naphtha, with an approximate boiling range from 401 d grees F to 650 degrees F.

***Liquefied Petroleum Gases (LPG).*** Ethane, ethylene, pr pane, propylene, normal butane, butylene, and isobuta produced at refineries or natural gas processing plan including plants that fractionate raw natural gas plant li uids.

***Liquefied Refinery Gases (LRG).*** Liquefied petroleu gases fractionated from refinery or still gases. Throu compression and/or refrigeration, they are retained in t liquid state. The reported categories are ethane/ethylen propane/propylene, normal butane butylene, and isobutan Excludes still gas.

***Lubricating Oils.*** A substance used to reduce frictio between bearing surfaces. Petroleum lubricants may b produced either from distillates or residues. Other su stances may be added to impart or improve certain require properties. Do not include byproducts of lubricating o refining such as aromatic extracts derived from solve extraction or tars derived from deasphalting. "Lubricants cludes all grades of lubricating oils from spindle oil to ylinder oil and those used in greases. The three categories clude:

*Bright Stock.* A refined, high viscosity lubricating oil base stock that is usually made from a residuum by a treatment such as deasphalting, acid treatment, or solvent extraction.

*Neutral.* A distillate lubricating oil base stock with a viscosity that is usually not above 550 Saybolt Universal Seconds (SUS) at 100 degrees F. A product of hydrotreating, acid treatment, or solvent extraction.

*Other.* A lubricating oil base stock used in finished lubricating oils and greases, including black, coastal, and red oils.

*iddle Distillates.* A general classification that includes stillate fuel oil and kerosene.

*iscellaneous Products.* Includes all finished products not assified elsewhere (e.g., petrolatum, lube refining byproıcts (aromatic extracts and tars), absorption oils, ram-jet el, petroleum rocket fuels, synthetic natural gas feedocks, speciality oils, and medicinal oils).

*otor Gasoline (Finished).* A complex mixture of relavely volatile hydrocarbons, with or without small quantis of additives, that have been blended to form a fuel itable for use in spark-ignition engines. Motor gasoline, as ven in ASTM Specification D439 or Federal Specification V-G-1690B, include a range in distillation temperatures om 122 to 158 degrees F at the 10-percent recovery point d from 365 to 374 degrees F at the 90-percent recovery int. The Reid Vapor Pressure ranges from 9 to 15 psi. Iotor gasoline" includes finished leaded gasoline, finıed unleaded gasoline, and gasohol. Blendstock is exıded until blending has been completed. Alcohol that is to used in the blending of gasohol is also excluded.

*Finished Leaded Gasoline.* Contains more than 0.05 gram of lead per gallon or more than 0.005 gram of phosphorus per gallon. Premium and regular grades are included, depending on the octane rating. Includes leaded gasohol. Blendstock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

*Finished Unleaded Gasoline.* Contains not more than 0.05 gram of lead per gallon and not more than 0.005 gram of phosphorus per gallon. Premium and regular grades are included, depending on the octane rating. Includes unleaded gasohol. Blendstock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

*Gasohol.* A blend of finished motor gasoline (leaded or unleaded) and alcohol (generally ethanol but sometimes methanol), limited to 10 percent by volume of alcohol.

*Motor Gasoline Blending Components.* Naphthas which will be used for blending or compounding into finished motor gasoline (e.g. straight-run gasoline, alkylate, and reformate). Excludes oxygenates (alcohols, ethers), butane, and pentanes plus.

*Naphtha.* A generic term applied to a petroleum fraction with an approximate boiling range between 122 and 400 degrees F.

*Naphtha-type Jet Fuel.* A fuel in the heavy naphtha boiling range. ASTM Specification D1655 specifies for this fuel maximum distillation temperatures of 290 degrees F at the 20-percent recovery point and 470 degrees F at the 90-percent point, meeting Military Specification MIL-T-5624L (Grade JP-4). JP-4 is used for turbojet and turboprop aircraft engines, primarily by the military. Excludes ram-jet and petroleum rocket fuels.

*Natural Gas.* A mixture of hydrocarbons and small quantities of various nonhydrocarbons existing in the gaseous phase or in solution with crude oil in underground reservoirs.

*Natural Gas Field Facility.* A field facility designed to process natural gas produced from more than one lease for the purpose of recovering condensate from a stream of natural gas; however, some field facilities are designed to recover propane, normal butane, pentanes plus, etc., and to control the quality of natural gas to be marketed.

*Natural Gas Plant Liquids.* Natural gas liquids recovered from natural gas in gas processing plants, and in some situations, from natural gas field facilities. Natural gas liquids extracted by fractionators are also included. These liquids are defined according to the published specifications of the Gas Processors Association and the American Society for Testing and Materials and are classified as follows: ethane, propane, normal butane, isobutane, pentanes plus, and other products from natural gas processing plants (i.e., products meeting the standards for finished petroleum products produced at natural gas processing plants, such as finished motor gasoline, finished aviation gasoline, special naphthas, kerosene, distillate fuel oil, and miscellaneous products).

*Natural Gas Processing Plant.* A gas processing plant is a facility designed (1) to achieve the recovery of natural gas liquids from the stream of natural gas which may or may not have been processed through lease separators and field facilities, and (2) to control the quality of the natural gas to be marketed. Cycling plants are classified as gas processing plants.

*Natural Gasoline and Isopentane.* A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas, that meets vapor pressure, end-point, and other specifications for natural gasoline set by the Gas Processors Association. Includes isopentane which is a saturated branch-chain hydrocarbon, (C5H12), obtained by fractionation of natural gasoline or isomerization of normal pentane.

*Normal Butane. See Butane.*

*OPEC.* The acronym for the Organization of Petroleum Exporting Countries, that have organized for the purpose of negotiating with oil companies on matters of oil production, prices and future concession rights. Current members are Algeria, Ecuador, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela.

*Operable Capacity.* The amount of capacity that, at the beginning of the period, is in operation; not in operation and not under active repair, but capable of being placed in operation within 30 days; or not in operation but under active repair that can be completed within 90 days. Operable capacity is the sum of the operating and idle capacity and is measured in barrels per calendar day or barrels per stream day.

*Operating Capacity.* The component of operable capacity that is in operation at the beginning of the period.

*Other Hydrocarbons.* Materials received by a refinery and consumed as a raw material. Includes hydrogen, coal tar derivatives, gilsonite, and natural gas received by the refinery for reforming into hydrogen. Natural gas to be used as fuel is excluded.

*Oxygenates.* Oxygenates include both alcohols and ethers used as octane boosting additives for gasoline (e.g., methyl tertiary butyl ether).

*Pentanes Plus.* A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas. Includes isopentane, natural gasoline, and plant condensate.

*Petrochemical Feedstocks.* Chemical feedstocks derived from petroleum principally for the manufacture of chemicals, synthetic rubber, and a variety of plastics. The categ ries reported are "Naphtha-Less than 400 degrees F" a "Other oils over 400 degrees F."

> *Naphtha-Less Than 400 Degrees F.* A naphtha wi a boiling range of less than 400 degrees F that intended for use as a petrochemical feedstock.

> *Other Oils-Over 400 Degrees F.* Oils with a boili range of over 400 degrees F that is intended for use a petrochemical feedstock.

*Petroleum Coke.* A residue, the final product of the conde sation process in cracking. This product is reported marketable coke or catalyst coke. The conversion factor 5 barrels of 42 U.S. gallons per short ton.

> *Marketable Coke.* Those grades of coke produced delayed or fluid cokers which may be recovered relatively pure carbon. This "green" coke may be s as is or further purified by calcining.

> *Catalyst Coke.* In many catalytic operations (e. catalytic cracking) carbon is deposited on the cataly thus deactivating the catalyst. The catalyst is reac vated by burning off the carbon, which is used as a f in the refining process. This carbon or coke is recoverable in a concentrated form.

*Petroleum Products.* Petroleum products are obtained fr the processing of crude oil (including lease condensat natural gas, and other hydrocarbon compounds. Petrole products include unfinished oils, liquefied petroleum gas pentanes plus, aviation gasoline, motor gasoline, napht type jet fuel, kerosene-type jet fuel, kerosene, distillate f oil, residual fuel oil, petrochemical feedstocks, spec naphthas, lubricants, waxes, petroleum coke, asphalt, ro oil, still gas, and miscellaneous products.

*Plant Condensate.* One of the natural gas liquids, mos pentanes and heavier hydrocarbons, recovered and se rated as liquids at gas inlet separators or scrubbers in pr essing plants.

*Primary Stocks.* Stocks of crude oil or petroleum produ held in storage at (or in) leases, refineries, natural g processing plant pipelines, tankfarms, and bulk termin that can store at least 50,000 barrels of petroleum produ or that can receive petroleum products by tanker, barge, pipeline. Crude oil that is in-transit by water from Alas or that is stored on Federal leases or in the Strategic Pet leum Reserve is included. Primary Stocks exclude stocks foreign origin that are held in bonded warehouse storag

*roduction Capacity.* The amount of product that can be
roduced from processing facilities.

*ropane.* A normally gaseous straight-chain hydrocarbon,
C3H8). It is a colorless paraffinic gas that boils at a tem-
erature of -43.67 degrees F. It is extracted from natural gas
r refinery gas streams. It includes all products designated
ASTM Specification D1835 and Gas Processors Associa-
on Specifications for commercial propane and HD-5 pro-
ane.

*ropylene.* An olefinic hydrocarbon, (C3H6), recovered
om refinery processes or petrochemical processes.

*efinery.* An installation that manufactures finished petro-
eum products from crude oil, unfinished oils, natural gas
quids, other hydrocarbons, and alcohol.

*esidual Fuel Oil.* The topped crude of refinery operations
hich includes No. 5 and No. 6 fuel oils as defined in ASTM
pecification D396 and Federal Specification VV-F-815C,
avy Special fuel oil as defined in Military Specification
IIL-F-859E including Amendment 2 (NATO Symbol F-
7), and Bunker C fuel oil. Residual fuel oil is used for the
roduction of electric power, space heating, vessel bunker-
g, and various industrial purposes. Imports of residual fuel
il include "Imported Crude Oil Burned as Fuel."

*esiduum.* Residue from crude oil after distilling off all but
e heaviest components, with a boiling range greater than
000 degrees F.

*oad Oil.* Any heavy petroleum oil, including residual
sphaltic oil used as a dust pallative and surface treatment on
oads and highways. It is generally produced in six grades
om 0, the most liquid, to 5, the most viscous.

*hell Storage Capacity.* The design capacity of a petroleum
orage tank and is always greater than or equal to working
orage capacity.

*pecial Naphthas.* All finished products within the naphtha
oiling range that are used as paint thinners, cleaners, or
olvents. These products are refined to a specified flash
oint. Special naphthas include all commercial hexane and
eaning solvents conforming to ASTM Specification
1836 and D484, respectively. Naphthas to be blended or
arketed as motor gasoline or aviation gasoline, or that are
be used as petrochemical and synthetic natural gas (SNG)
edstocks are excluded.

*team (Purchased).* Steam, purchased for use by a refinery,
at was not generated from within the refinery complex.

*Still Gas (Refinery Gas).* Any form or mixture of gases produced in refineries by distillation, cracking, reforming, and other processes. The principal constituents are methane, ethane, ethylene, normal butane, butylene, propane, propylene, etc. Still gas is used as a refinery fuel and a petrochemical feedstock. The conversion factor is 6.000 million BTU's per barrel (42 U.S. gallons).

*Strategic Petroleum Reserve (SPR).* Petroleum stocks maintained by the Federal Government for use during periods of major supply interruption.

*Sulfur.* A nonmetallic element of lemon-yellow color, sometimes known as "brimstone."

*Thermal Cracking.* A refining process in which heat and pressure are used to break down, rearrange, or combine hydrocarbon molecules. Thermal cracking includes gas oil, visbreaking, fluid coking, delayed coking, and other thermal cracking processes (e.g., flexicoking). See individual categories for definition.

*Toluene.* An aromatic hydrocarbon, (C6H5CH3), somewhat similar to benzene but of a higher boiling point produced in the coking of coal and also by petroleum refining processes. It is the basis of dyes, explosives, and aromatic compounds. Along with xylene, it is a key component in unleaded gasoline.

*Unfinished Oils.* Includes all oils requiring further processing, except those requiring only mechanical blending. Includes naphthas, kerosene, light and heavy gas oils, and residuum. See individual categories for definition.

*Unfractionated Streams.* Mixtures of unsegregated natural gas liquid components excluding those in plant condensate. This product is extracted from natural gas.

*United States.* The United States is defined as the 50 States and the District of Columbia. U.S. exports include shipments to U.S. territories, and imports include receipts from U.S. territories.

*Vacuum Distillation.* Distillation under reduced pressure (less the atmospheric) which lowers the boiling temperature of the liquid being distilled. This technique with its relatively low temperatures prevents cracking or decomposition of the charge stock.

*Visbreaking.* A thermal process in which heavy atmospheric or vacuum-still bottoms are cracked at moderate temperatures to increase production of distillate products and reduce viscosity of the distillation residues.

***Wax.*** A solid or semi-solid material derived from petroleum distillates or residues by such treatments as chilling, precipitating with a solvent, or de-oiling. It is light-colored, more-or-less translucent crystalline mass, slightly greasy to the touch, consisting of a mixture of solid hydrocarbons in which the paraffin series predominates. Includes all marketable wax whether crude scale or fully refined. The three grades included are microcrystalline, crystalline-fully refined, and crystalline-other. The conversion factor is 280 pounds per 42 U.S. gallons per barrel.

> ***Microcrystalline Wax.*** Wax extracted from certain petroleum residues having a finer and less apparent crystalline structure than paraffin wax and having the following physical characteristics: Penetration at 77 degrees F (D1321)-60 maximum. Viscosity at 210 degrees F in Saybolt Universal Seconds (SUS). (D88)-60 SUS (10.22 centistokes) minimum to 150 SUS (31.8 centistokes) maximum. Oil content (D721)-5 percent minimum.
>
> ***Crystalline-Fully Refined Wax.*** A light-colored paraffin wax having the following characteristics: Viscosity at 210 degrees F (D88)-59.9 SUS (10.18 centistoke maximum. Oil content (D721)-0.5 percent maximu Other +20 color, Saybolt minimum.
>
> ***Crystalline-Other Wax.*** A paraffin wax having th following characteristics: Viscosity at 210 degrees (D88)-59.9 SUS (10.18 centistokes) maximum. O content (D721)-0.51 percent minimum to 15 perce maximum.

***Western Hemishpere.*** That half of the earth that includ North and South America and adjacent islands.

***Working Storage Capacity.*** The volume between the max mum safe fill capacity and the quantity below which pum suction is ineffective (bottoms).

***Xylene.*** An aromatic hydrocarbon, (C6H4Y(CH3)2), pr duced in petroleum refining (cracking) processes. On important use is as a solvent in the manufacture of paint Along with toluene, it is a key ingredient in unleade gasoline.

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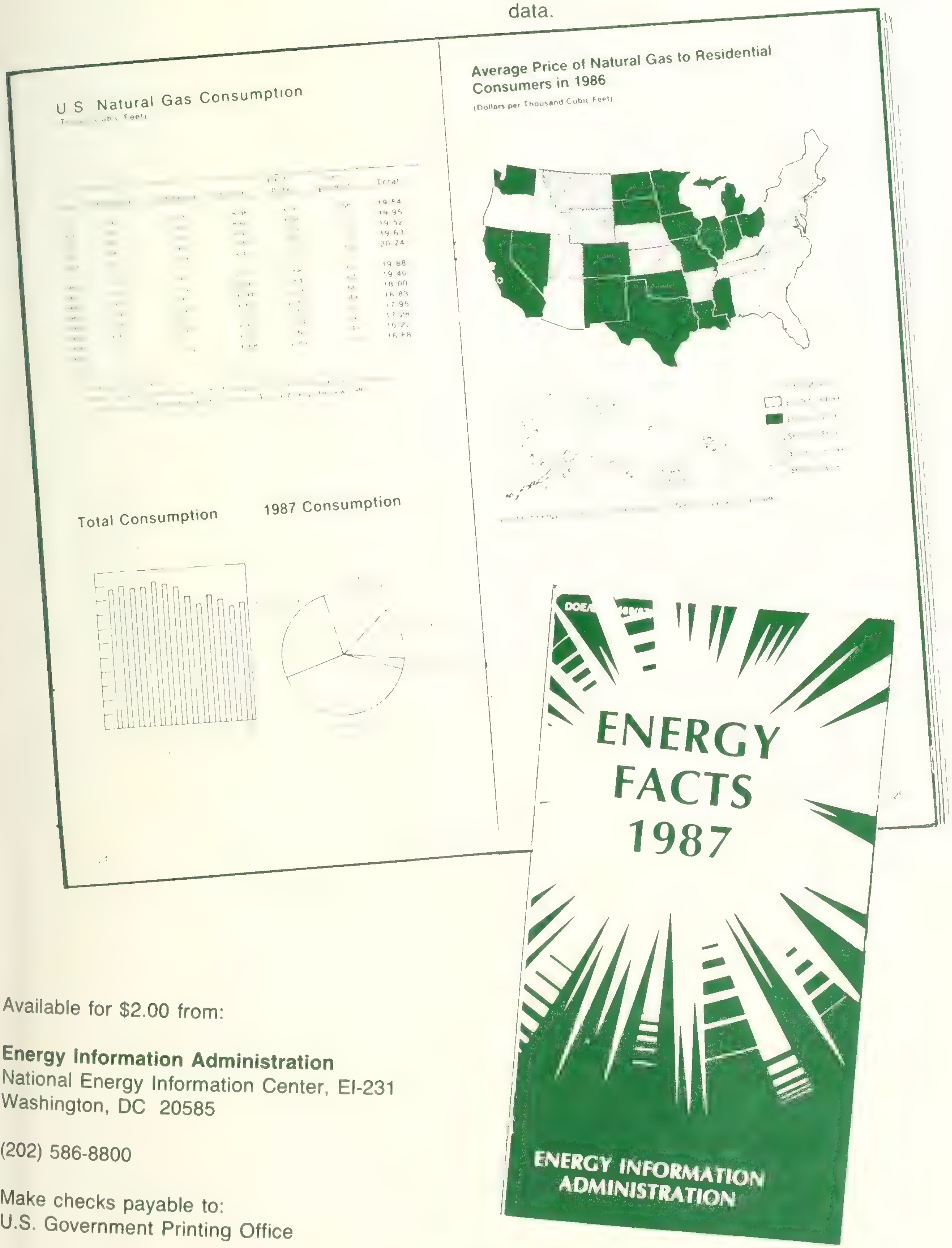
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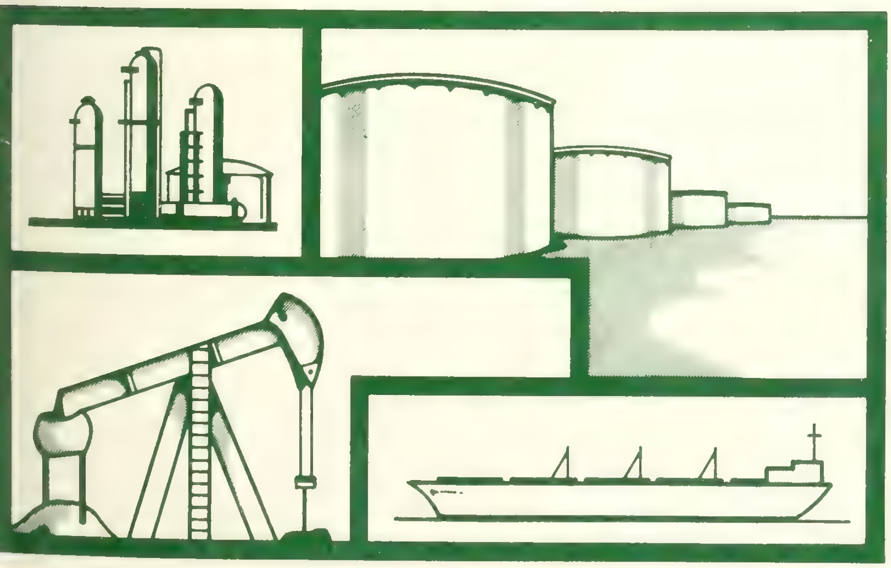

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## August 1988

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# Articles

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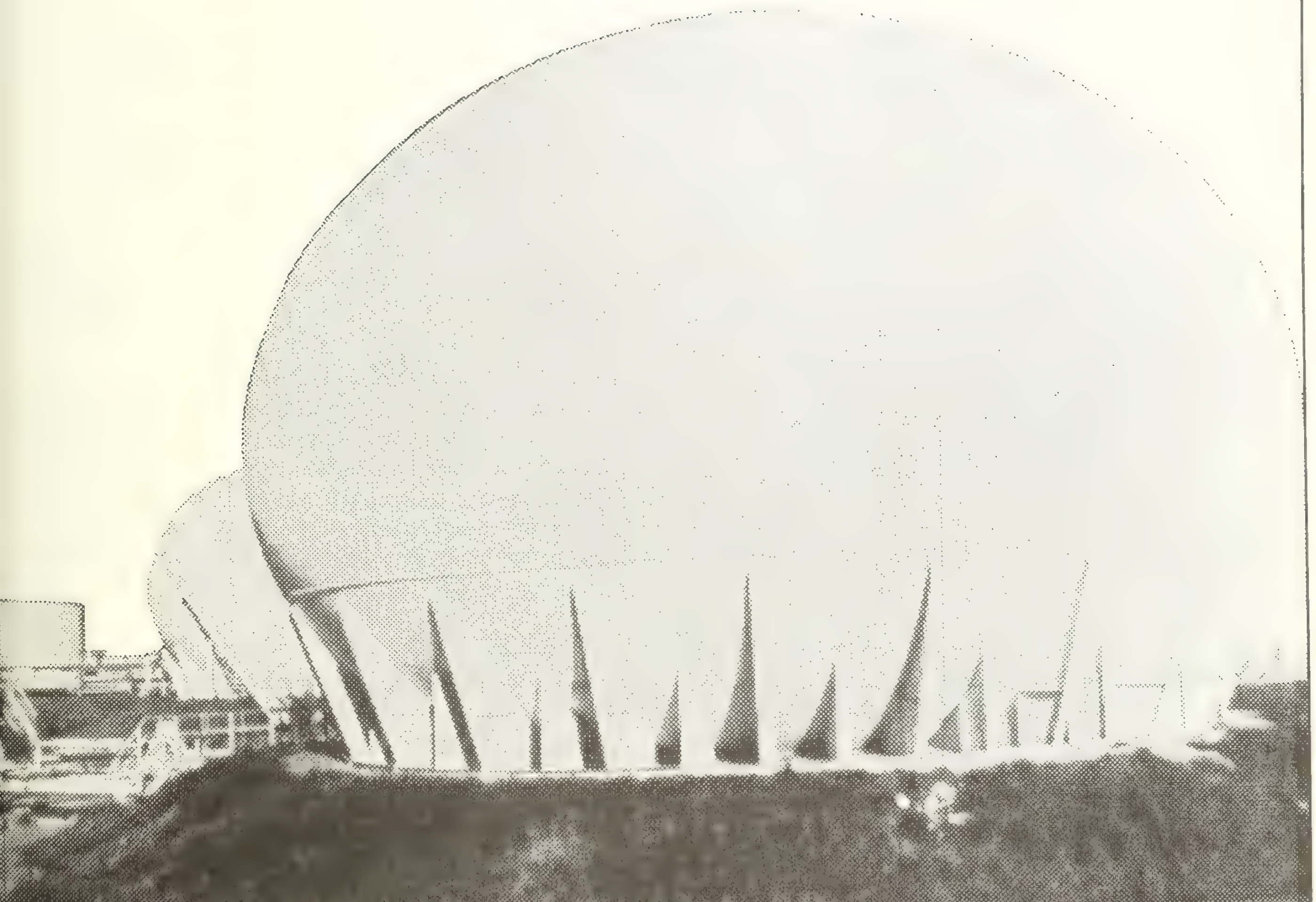
# Highlights



# Highlights

Total U.S. demand for petroleum products (measured as products supplied) averaged 17.4 million barrels per day in August 1988. This is over 0.8 million barrels per day above the level for July and over 1.0 million barrels above the level for August 1987. Total product supplied for the first 8 months of 1988 was 2.5 percent higher than during the same period in 1987. Demand for all major products increased in August, with distillate, asphalt and road oil, and residual fuel oil showing the largest gains.

Other highlights for August 1988 include the following:

- Stocks of crude oil, excluding the Strategic Petroleum Reserve (SPR), dropped 16.2 million barrels in August to 333.2 million barrels.
- Total product stocks increased for the second month in a row, rising 9.4 million barrels to 735.4 million barrels.
- The U.S. refinery utilization rate increased from 86.5 percent in July to 87.4 percent in August.

## Products Supplied

The demand for distillate fuel oil increased by 0.2 million barrels per day in August to nearly 2.9 million barrels per day (Table H1). This is 12.0 percent above the level for August 1987. For the first 8 months of 1988, distillate demand was 4.5 percent higher than for the comparable period in 1987. Greater consumption of diesel fuel in the transportation sector (especially trucking) and continued economic growth account for much of the increase in distillate fuel oil consumption this year.

Residual fuel oil demand averaged nearly 1.3 million barrels per day in August, about 0.1 million barrels per day higher than in July. Unusually hot weather during the month throughout most of the country pushed up the demand for heavy fuel oil at electric utilities. The number of cooling degree days during August was about 20 percent higher than normal. Increased imports and stock withdrawals helped to meet the increase in demand. For the first 8 months of 1988, residual fuel oil demand was 1.8 percent above its level during the comparable period of 1987. Nevertheless, natural gas continues to displace residual fuel oil in a number of industrial markets.

Motor gasoline demand increased marginally in August and averaged 7.5 million barrels per day. This is, however, nearly 0.2 million barrels per day higher than during August 1987. Motor gasoline demand during the first 8 months of 1988 was 1.5 percent higher than during the first 8 months of 1987, reflecting an increase in highway traffic of about 4 percent.

Road construction in August pushed the demand for asphalt and road oil to 0.8 million barrels per day. Demand increased 0.1 million barrels per day from the July 1988 and August 1987 levels. August is a peak month for asphalt and road oil consumption. Increased refinery production and stock withdrawals helped to satisfy the higher August demand. Year-to-date demand for asphalt and road oil averaged 0.5 million barrels per day, about the same as for the first 8 months of 1987.

## Crude Oil Stocks

Crude oil stocks (excluding SPR) fell for the second straight month in August and were at the lowest level since August 1987. Crude oil stocks of 333.2 million barrels at the end of August were 16.2 million barrels below the level at the end of July. Compared with last year's level, crude oil stocks at the end of August 1988 were just 0.7 million barrels higher than stocks at the end of August 1987.

## Product Stocks

Total ending stocks of petroleum products rose 9.4 million barrels in August to 735.4 million barrels. Stocks of liquefied petroleum gases (LPGs), distillate fuel oil, and motor gasoline showed sizeable increases which were offset to some extent by decreases in asphalt and road oil and residual fuel oil stocks. Inventories of LPGs rose 8.7 million barrels in August to 120.6 million barrels, primarily because of a 4.9 million barrel increase in propane stocks and a 3.8 million barrel increase in normal butane stocks. Distillate fuel oil stocks

## Table H1. Petroleum Supply Summary, August 1988
(Million Barrels per Day, Except Where Noted)

| Category | 1988 | | | 1987 | Cumulative January Through August | |
|---|---|---|---|---|---|---|
| | August | July | Difference[1] | August | 1988 | 1987 |
| **Products Supplied** | **17.4** | **16.6** | **0.8** | **16.3** | **17.0** | **16.6** |
| Finished Motor Gasoline | 7.5 | 7.5 | (s) | 7.3 | 7.3 | 7.2 |
| Distillate Fuel Oil | 2.9 | 2.6 | 0.2 | 2.6 | 3.1 | 2.9 |
| Residual Fuel Oil | 1.3 | 1.2 | 0.1 | 1.2 | 1.3 | 1.3 |
| Liquefied Petroleum Gases | 1.5 | 1.4 | 0.1 | 1.4 | 1.6 | 1.5 |
| Other Petroleum Products[2] | 4.2 | 3.8 | 0.4 | 3.9 | 3.7 | 3.6 |
| Crude Oil | (s) | (s) | (s) | (s) | (s) | (s) |
| **Crude Oil Inputs** | **13.8** | **13.7** | **0.1** | **13.4** | **13.3** | **12.8** |
| **Refinery Utilization (percent)** | **87.4** | **86.5** | **0.9** | **86.7** | **84.6** | **82.9** |
| **Imports** | **7.2** | **7.0** | **0.2** | **7.5** | **7.0** | **6.5** |
| **Crude Oil** | **5.0** | **5.0** | **(s)** | **5.5** | **4.9** | **4.5** |
| SPR | (s) | (s) | (s) | 0.1 | (s) | 0.1 |
| Other | 5.0 | 5.0 | (s) | 5.4 | 4.9 | 4.4 |
| **Products** | **2.1** | **2.0** | **0.1** | **1.9** | **2.0** | **2.0** |
| Finished Motor Gasoline | 0.5 | 0.5 | (s) | 0.4 | 0.4 | 0.4 |
| Distillate Fuel Oil | 0.3 | 0.2 | 0.1 | 0.2 | 0.3 | 0.3 |
| Residual Fuel Oil | 0.5 | 0.4 | 0.1 | 0.5 | 0.5 | 0.6 |
| Liquefied Petroleum Gases | 0.2 | 0.2 | (s) | 0.2 | 0.2 | 0.2 |
| Other Petroleum Products[2] | 0.6 | 0.7 | (s) | 0.6 | 0.7 | 0.6 |
| **Exports** | **0.8** | **0.8** | (s) | **0.7** | **0.8** | **0.7** |
| Crude Oil | 0.2 | 0.2 | (s) | 0.1 | 0.2 | 0.2 |
| Products | 0.7 | 0.6 | (s) | 0.5 | 0.7 | 0.6 |
| **Total Net Imports** | **6.4** | **6.2** | **0.2** | **6.8** | **6.2** | **5.8** |
| **Stock Change[3]** | **-0.2** | **0.5** | -0.7 | 1.1 | 0.1 | (s) |
| Crude Oil | -0.5 | -0.3 | -0.2 | 0.3 | (s) | 0.1 |
| Products | 0.3 | 0.8 | -0.5 | 0.7 | 0.1 | -0.1 |
| **Stocks at End of Period (Million Barrels)** | | | | | | |
| **Crude Oil** | **885.3** | **900.7** | **-15.4** | **864.4** | -- | -- |
| SPR | 552.1 | 551.3 | 0.8 | 532.0 | -- | -- |
| Other | 333.2 | 349.3 | -16.2 | 332.5 | -- | -- |
| **Products** | **735.4** | **726.0** | **9.4** | **727.6** | -- | -- |
| Finished Motor Gasoline | 182.4 | 177.9 | 4.4 | 188.0 | -- | -- |
| Distillate Fuel Oil | 125.2 | 119.4 | 5.8 | 124.7 | -- | -- |
| Residual Fuel Oil | 37.8 | 41.1 | -3.2 | 45.7 | -- | -- |
| Liquefied Petroleum Gases | 120.6 | 111.9 | 8.7 | 111.9 | -- | -- |
| Other Petroleum Products[2] | 269.4 | 275.7 | -6.2 | 257.2 | -- | -- |
| **Total Crude Oil and Products** | **1,620.7** | **1,626.7** | **-5.9** | **1,592.0** | -- | -- |

[1] Difference is equal to volume for current month minus volume for previous month.

[2] Includes pentanes plus, other hydrocarbons and alcohol, unfinished oils, gasoline blending components, and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil, and liquefied petroleum gases.

[3] A negative number indicates a decrease in stocks and a positive number indicates an increase.

(s) = Less than 0.05 million barrels or less than 0.05 percent.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration: *Petroleum Supply Annual*, 1987 (June 1988). Appropriate issues of *Petroleum Supply Monthly* . (See Explanatory Notes 9.1 through 9.6.)

increased in August for the fifth consecutive month in preparation for the winter heating season. Distillate stocks rose 5.8 million barrels in August to 125.2 million barrels. Finished motor gasoline stocks increased for the second consecutive month and stood at 182.4 million barrels at the end of August. This was 4.4 million barrels above the level at the end of July. Increases in motor gasoline stocks are inconsistent with observed trends for this time of year, the peak driving season. Unusually high production levels and relatively flat demand contributed to the build-up in motor gasoline stocks.

Asphalt and road oil inventories in August fell 3.7 million barrels to 21.9 million barrels, in response to increased demand for these products. Residual fuel oil stocks were reduced by 3.2 million barrels in August to 37.8 million barrels. Higher than normal demand for heavy fuel oils at utilities during the month contributed to the decrease.

## Refinery Utilization

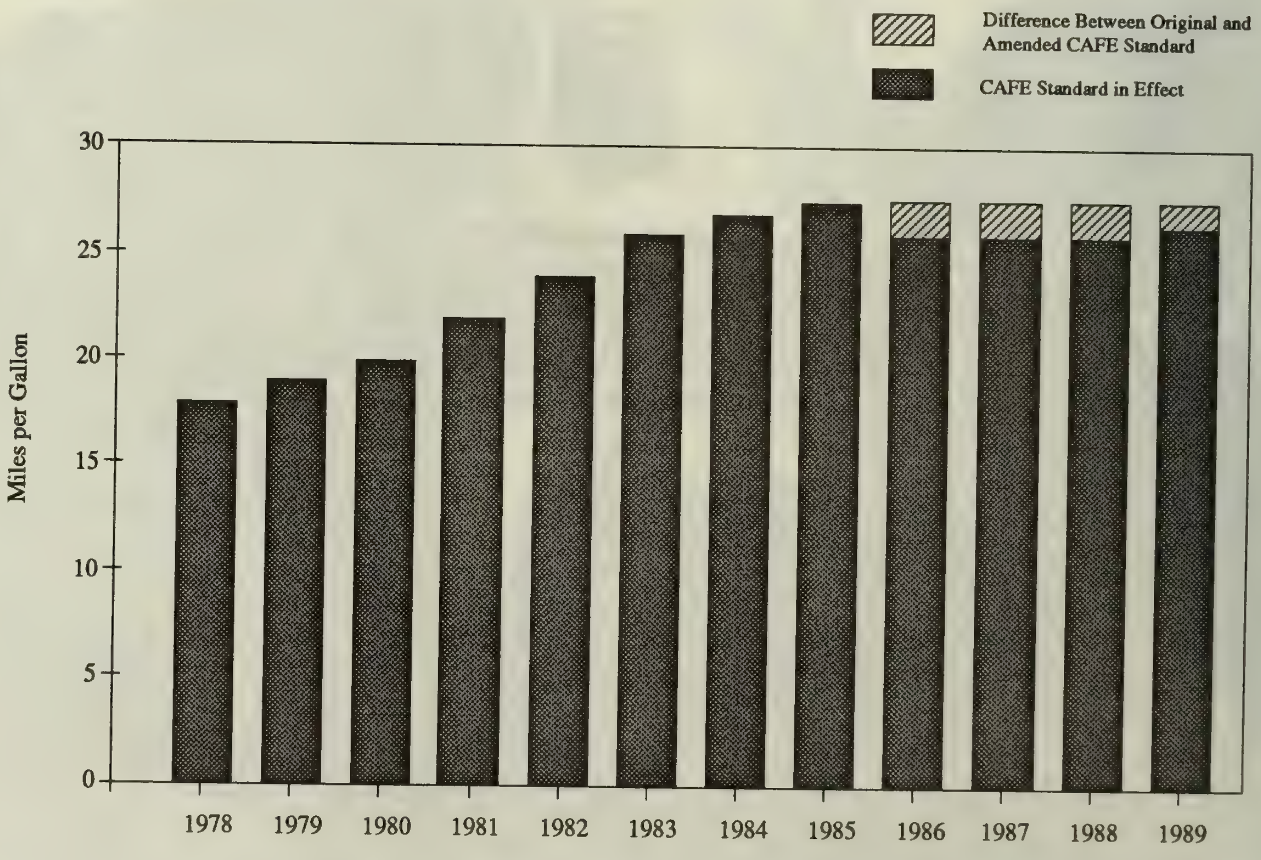
U.S. refinery utilization increased in August for the sixth consecutive month. From a rate of 86.5 percent in July, refinery utilization averaged 87.4 percent in August. An increase in gross inputs to crude oil distillation units of over 0.1 million barrels per day is almost entirely responsible for the increase in refinery utilization. These averaged 13.9 million barrels per day in August, while operable capacity averaged 16.0 million barrels per day. Downstream refinery activity also increased this month. Inputs of fresh feed to catalytic cracking, catalytic hydrocracking, and coking units averaged nearly 7.2 million barrels per day, an increase of about 0.1 million barrels per day above July's level. Much of the recent increase in downstream refinery activity is due to higher demand for light-end products.

*During the first 8 months of 1988, much of the 4.5-percent rise in distillate fuel oil demand was due to increased consumption of diesel fuel by the transportation sector, particularly in trucking.*

# Fuel Economy Standards Amended

The National Highway Traffic Safety Administration (NHTSA) announced a reduction of the Corporate Average Fuel Economy (CAFE) standard for model year 1989 automobiles from 27.5 to 26.5 miles per gallon (mpg) effective October 1, 1988 (Figure H1). The new CAFE standard represents an increase from the current 26.0 mpg standard but falls short of the 27.5 mpg standard established by the Energy Policy and Conservation Act of 1975. Beginning in 1978, CAFE standards were scheduled to rise each year until they reached 27.5 mpg by model year 1985. They were to remain at this level for successive years. The 27.5 mpg standard was implemented for model year 1985 automobiles, but was lowered by the NHTSA to 26.0 mpg for model years 1986 through 1988. The NHTSA was given authority to amend the CAFE standards under Title V of the Energy Policy and Conservation Act. A ruling on the standard for model year 1990 automobiles is expected within the next few months.

**Figure H1. Corporate Average Fuel Economy Standards, 1978-1989**



Source: *U. S. Department of Transportation*, National Highway Traffic Safety Administration.

# Summary Statistics

## Table S1. Crude Oil[1] and Petroleum Products Overview

| | Field Production | | | Stock Withdrawal[2] | | Petroleum Products Supplied | Ending Stocks[3] |
|---|---|---|---|---|---|---|---|
| | Total Domestic[4] | Crude Oil | Natural Gas Plant Liquids | Crude Oil[5] | Petroleum Products | | Crude Oil[5] and Petroleum Products |
| | Thousand Barrels per Day | | | | | | Million Barrels |
| **1973 Average** | **10,975** | **9,208** | **1,738** | **11** | **-146** | **17,308** | **1,008** |
| **1974 Average** | **10,498** | **8,774** | **1,688** | **-62** | **-117** | **16,653** | **[8] 1,074** |
| **1975 Average** | **10,045** | **8,375** | **1,633** | **[8] -17** | **[8] -15** | **16,322** | **1,133** |
| **1976 Average** | **9,774** | **8,132** | **1,603** | **-39** | **96** | **17,461** | **1,112** |
| **1977 Average** | **9,913** | **8,245** | **1,618** | **-170** | **-378** | **18,431** | **1,312** |
| **1978 Average** | **10,328** | **8,707** | **1,567** | **-78** | **172** | **18,847** | **1,278** |
| **1979 Average** | **10,179** | **8,552** | **1,584** | **-148** | **-25** | **18,513** | **1,341** |
| **1980 Average** | **10,214** | **8,597** | **1,573** | **-98** | **-42** | **17,056** | **[8] 1,392** |
| **1981 Average** | **10,230** | **8,572** | **1,609** | **[8] -290** | **[8] 130** | **16,058** | **1,484** |
| **1982 Average** | **10,252** | **8,649** | **1,550** | **-136** | **283** | **15,296** | **[8] 1,430** |
| **1983 Average** | **10,299** | **8,688** | **1,559** | **[8] -214** | **[8] 234** | **15,231** | **1,454** |
| **1984 Average** | **10,554** | **8,879** | **1,630** | **-199** | **-81** | **15,726** | **1,556** |
| **1985 Average** | **10,636** | **8,971** | **1,609** | **-50** | **153** | **15,726** | **1,519** |
| **1986** January | 10,911 | 9,137 | 1,711 | -383 | -151 | 16,088 | 1,535 |
| February | 10,916 | 9,173 | 1,696 | -37 | 804 | 16,186 | 1,514 |
| March | 10,664 | 9,013 | 1,604 | -345 | 1,160 | 16,276 | 1,489 |
| April | 10,435 | 8,864 | 1,523 | 41 | 262 | 15,945 | 1,479 |
| May | 10,440 | 8,838 | 1,543 | 260 | -1,109 | 15,993 | 1,506 |
| June | 10,187 | 8,623 | 1,504 | 3 | -1,238 | 16,049 | 1,543 |
| July | 10,225 | 8,660 | 1,507 | -541 | -422 | 16,307 | 1,573 |
| August | 9,875 | 8,374 | 1,445 | 242 | -551 | 16,618 | 1,582 |
| September | 9,852 | 8,328 | 1,468 | -217 | -973 | 15,909 | 1,618 |
| October | 9,954 | 8,419 | 1,477 | -233 | 476 | 16,602 | 1,610 |
| November | 10,061 | 8,412 | 1,569 | 95 | -147 | 16,221 | 1,612 |
| December | 9,985 | 8,352 | 1,571 | 186 | 443 | 17,131 | 1,593 |
| **Average** | **10,289** | **8,680** | **1,551** | **-78** | **-124** | **16,281** | – |
| **1987** January | 10,139 | 8,480 | 1,582 | -166 | 376 | 16,684 | 1,586 |
| February | 10,073 | 8,389 | 1,618 | -22 | 831 | 16,908 | 1,563 |
| March | 10,131 | 8,464 | 1,598 | -125 | 340 | 16,165 | 1,557 |
| April | 10,139 | 8,498 | 1,590 | 50 | 532 | 16,524 | 1,539 |
| May | 9,977 | 8,336 | 1,585 | 36 | -116 | 16,026 | 1,542 |
| June | 9,906 | 8,279 | 1,578 | -165 | -42 | 16,830 | 1,548 |
| July | 9,895 | 8,251 | 1,582 | 33 | -372 | 17,113 | 1,558 |
| August | 9,843 | 8,210 | 1,571 | -345 | -737 | 16,346 | 1,592 |
| September | 9,851 | 8,205 | 1,582 | -220 | -236 | 16,670 | 1,606 |
| October | 10,037 | 8,364 | 1,602 | -661 | 523 | 16,941 | 1,610 |
| November | 10,112 | 8,397 | 1,637 | -355 | -478 | 16,343 | 1,635 |
| December | 10,001 | 8,318 | 1,621 | 405 | 482 | 17,445 | 1,607 |
| **Average** | **10,008** | **8,349** | **1,595** | **-128** | **87** | **16,665** | -- |
| **1988** January | [E] 9,874 | [E] 8,245 | 1,569 | 56 | 285 | 17,224 | 1,597 |
| February | [E] 10,016 | [E] 8,376 | 1,594 | -130 | 895 | 17,584 | 1,575 |
| March | [E] 10,044 | [E] 8,347 | 1,628 | -212 | 748 | 17,530 | 1,559 |
| April | [E] 9,935 | [E] 8,268 | 1,609 | -194 | -450 | 16,440 | 1,578 |
| May | [E] 9,881 | [E] 8,203 | 1,624 | -41 | -1,049 | 16,117 | 1,612 |
| June | [E] 9,815 | [E] 8,158 | 1,605 | -113 | 146 | 17,054 | 1,611 |
| July | [E] 9,728 | [E] 8,059 | 1,609 | 270 | -788 | 16,555 | 1,627 |
| August* | [RE] 9,756 | [RE] 8,063 | [R] 1,624 | [R] 495 | [R] -304 | [R] 17,375 | [R] 1,621 |
| September** | [PE] 9,811 | [PE] 8,147 | [E] 1,607 | [E] *207* | [E] *-676* | [E] *16,088* | [E] *1,629* |
| **9-Mo. Average** | **[PE] 9,872** | **[PE] 8,206** | **[E] 1,608** | **[E] 40** | **[E] -138** | **[E] 16,884** | -- |
| **1987 9-Mo. Average** | **9,994** | **8,346** | **1,587** | **-104** | **55** | **16,581** | -- |
| **1986 9-Mo. Average** | **10,386** | **8,776** | **1,555** | **-110** | **-254** | **16,154** | -- |

[1] Includes lease condensate.

[2] A negative number indicates an increase in stocks and a positive number indicates a decrease.

[3] Stocks are totals as of end of period.

[4] Includes crude oil, natural gas plant liquids, other hydrocarbons, and alcohol.

[5] Includes stocks located in the Strategic Petroleum Reserve.

[6] Includes crude oil for storage in the Strategic Petroleum Reserve.

[7] Net Imports equal Imports minus Exports.

[8] In January 1975, 1981, and 1983, numerous respondents were added to surveys affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10.

Footnotes continued on following page.

## Table S1. Crude Oil[1] and Petroleum Products Overview (Continued)

| | Imports | | | Exports | | | |
|---|---|---|---|---|---|---|---|
| | Total | Crude Oil[6] | Petroleum Products | Total | Crude Oil | Petroleum Products | Net Imports[7] |
| | Thousand Barrels per Day | | | | | | |
| **1973 Average** | **6,256** | **3,244** | **3,012** | **231** | **2** | **229** | **6,025** |
| **1974 Average** | **6,112** | **3,477** | **2,635** | **221** | **3** | **218** | **5,892** |
| **1975 Average** | **6,056** | **4,105** | **1,951** | **209** | **6** | **204** | **5,846** |
| **1976 Average** | **7,313** | **5,287** | **2,026** | **223** | **8** | **215** | **7,090** |
| **1977 Average** | **8,807** | **6,615** | **2,193** | **243** | **50** | **193** | **8,565** |
| **1978 Average** | **8,363** | **6,356** | **2,008** | **362** | **158** | **204** | **8,002** |
| **1979 Average** | **8,456** | **6,519** | **1,937** | **472** | **235** | **237** | **7,984** |
| **1980 Average** | **6,909** | **5,263** | **1,646** | **544** | **287** | **258** | **6,365** |
| **1981 Average** | **5,996** | **4,396** | **1,599** | **595** | **228** | **367** | **5,401** |
| **1982 Average** | **5,113** | **3,488** | **1,625** | **815** | **236** | **579** | **4,298** |
| **1983 Average** | **5,051** | **3,329** | **1,722** | **739** | **164** | **575** | **4,312** |
| **1984 Average** | **5,437** | **3,426** | **2,011** | **722** | **181** | **541** | **4,715** |
| **1985 Average** | **5,067** | **3,201** | **1,866** | **781** | **204** | **577** | **4,286** |
| **1986** January | 5,573 | 3,472 | 2,101 | 859 | 159 | 700 | 4,714 |
| February | 4,676 | 2,968 | 1,709 | 876 | 162 | 715 | 3,800 |
| March | 4,712 | 2,988 | 1,724 | 732 | 212 | 520 | 3,980 |
| April | 5,439 | 3,684 | 1,755 | 850 | 94 | 756 | 4,589 |
| May | 6,400 | 4,250 | 2,150 | 724 | 98 | 625 | 5,676 |
| June | 6,848 | 4,635 | 2,213 | 642 | 240 | 401 | 6,206 |
| July | 6,942 | 4,726 | 2,216 | 685 | 65 | 620 | 6,256 |
| August | 7,168 | 4,859 | 2,309 | 868 | 233 | 635 | 6,300 |
| September | 7,090 | 5,031 | 2,059 | 714 | 161 | 553 | 6,375 |
| October | 6,427 | 4,419 | 2,008 | 831 | 151 | 680 | 5,597 |
| November | 6,592 | 4,615 | 1,977 | 821 | 115 | 706 | 5,771 |
| December | 6,700 | 4,412 | 2,288 | 820 | 159 | 661 | 5,881 |
| **Average** | **6,224** | **4,178** | **2,045** | **785** | **154** | **631** | **5,439** |
| **1987** January | 6,353 | 4,385 | 1,968 | 703 | 84 | 619 | 5,650 |
| February | 5,984 | 3,866 | 2,118 | 977 | 284 | 694 | 5,007 |
| March | 5,794 | 3,779 | 2,015 | 720 | 150 | 570 | 5,074 |
| April | 5,911 | 4,132 | 1,779 | 870 | 247 | 624 | 5,041 |
| May | 6,073 | 4,340 | 1,732 | 666 | 69 | 597 | 5,407 |
| June | 6,769 | 4,807 | 1,962 | 669 | 116 | 554 | 6,099 |
| July | 7,588 | 5,295 | 2,293 | 680 | 149 | 531 | 6,908 |
| August | 7,454 | 5,510 | 1,944 | 664 | 141 | 523 | 6,790 |
| September | 7,178 | 5,110 | 2,068 | 795 | 116 | 680 | 6,382 |
| October | 7,068 | 5,142 | 1,926 | 646 | 84 | 562 | 6,422 |
| November | 7,068 | 5,013 | 2,055 | 737 | 164 | 573 | 6,331 |
| December | 6,833 | 4,640 | 2,194 | 1,057 | 220 | 838 | 5,776 |
| **Average** | **6,678** | **4,674** | **2,004** | **764** | **151** | **613** | **5,914** |
| **1988** January | 6,900 | 4,619 | 2,281 | 891 | 212 | 679 | 6,009 |
| February | 6,995 | 4,692 | 2,303 | 867 | 149 | 718 | 6,128 |
| March | 6,727 | 4,788 | 1,938 | 839 | 218 | 622 | 5,888 |
| April | 7,050 | 5,126 | 1,924 | 678 | 117 | 562 | 6,371 |
| May | 7,218 | 5,234 | 1,983 | 817 | 141 | 676 | 6,401 |
| June | 6,885 | 5,055 | 1,830 | 941 | 141 | 800 | 5,944 |
| July | 6,994 | 5,006 | 1,988 | 831 | 191 | 640 | 6,164 |
| August* | R 7,174 | R 5,039 | R 2,135 | R 817 | R 155 | R 661 | R 6,357 |
| September** | E *6,810* | E *5,035* | E *1,775* | E 886 | E 166 | E 720 | E 5,924 |
| **9-Mo. Average** | **E 6,973** | **E 4,956** | **E 2,017** | **E 841** | **E 166** | **E 675** | **E 6,132** |
| **1987 9-Mo. Average** | **6,573** | **4,587** | **1,986** | **747** | **149** | **598** | **5,826** |
| **1986 9-Mo. Average** | **6,106** | **4,076** | **2,030** | **771** | **158** | **613** | **5,334** |

Footnotes continued.

R = Revised data. (s) = Less than 500 barrels per day. E = Estimated. PE = Preliminary estimate. RE = Revised estimate.

* See Explanatory Note 9.1.

** Italics denote estimates based upon preliminary data. See Explanatory Note 8.

Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: See the last page of this section.

**Figure S1. Petroleum Overview**

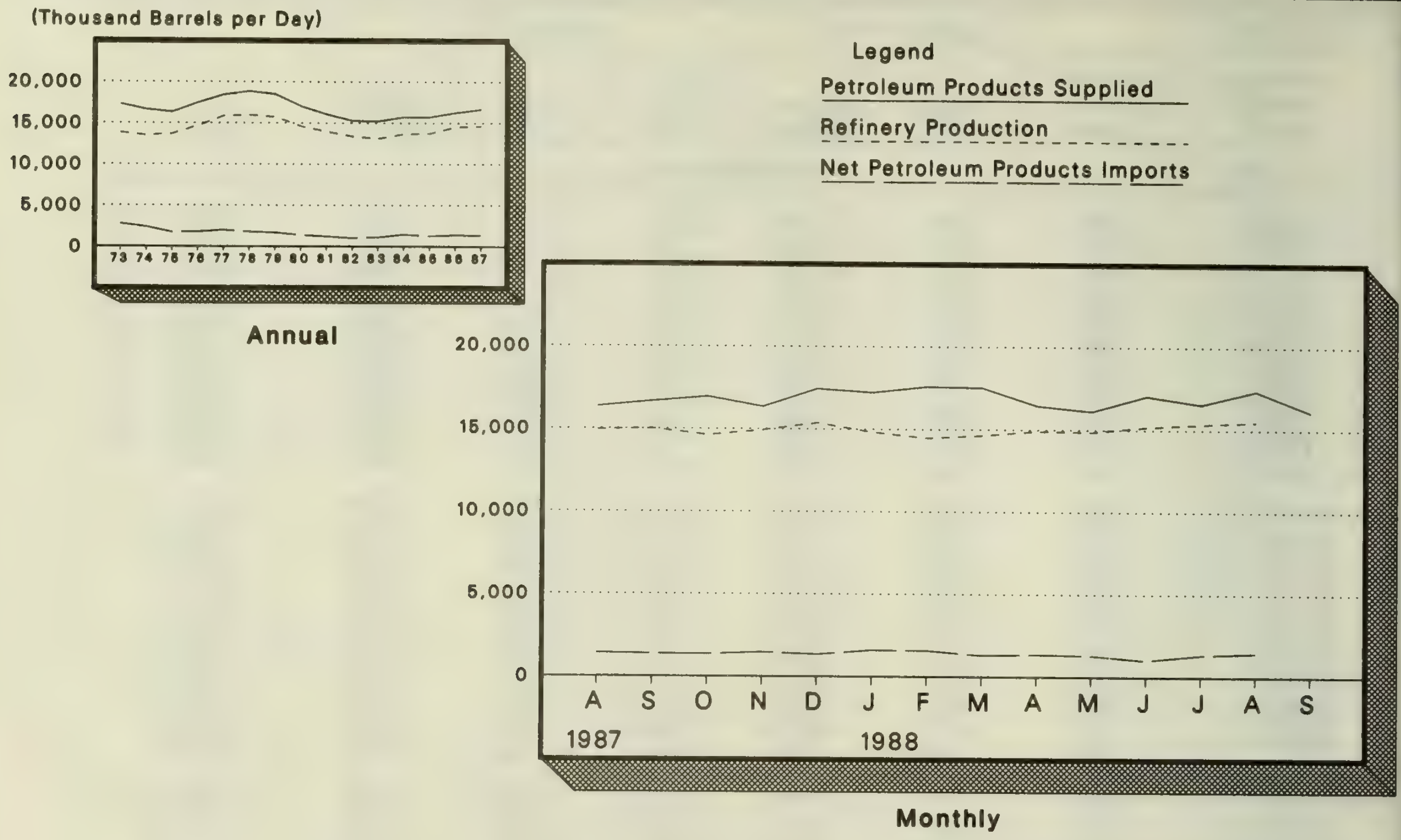
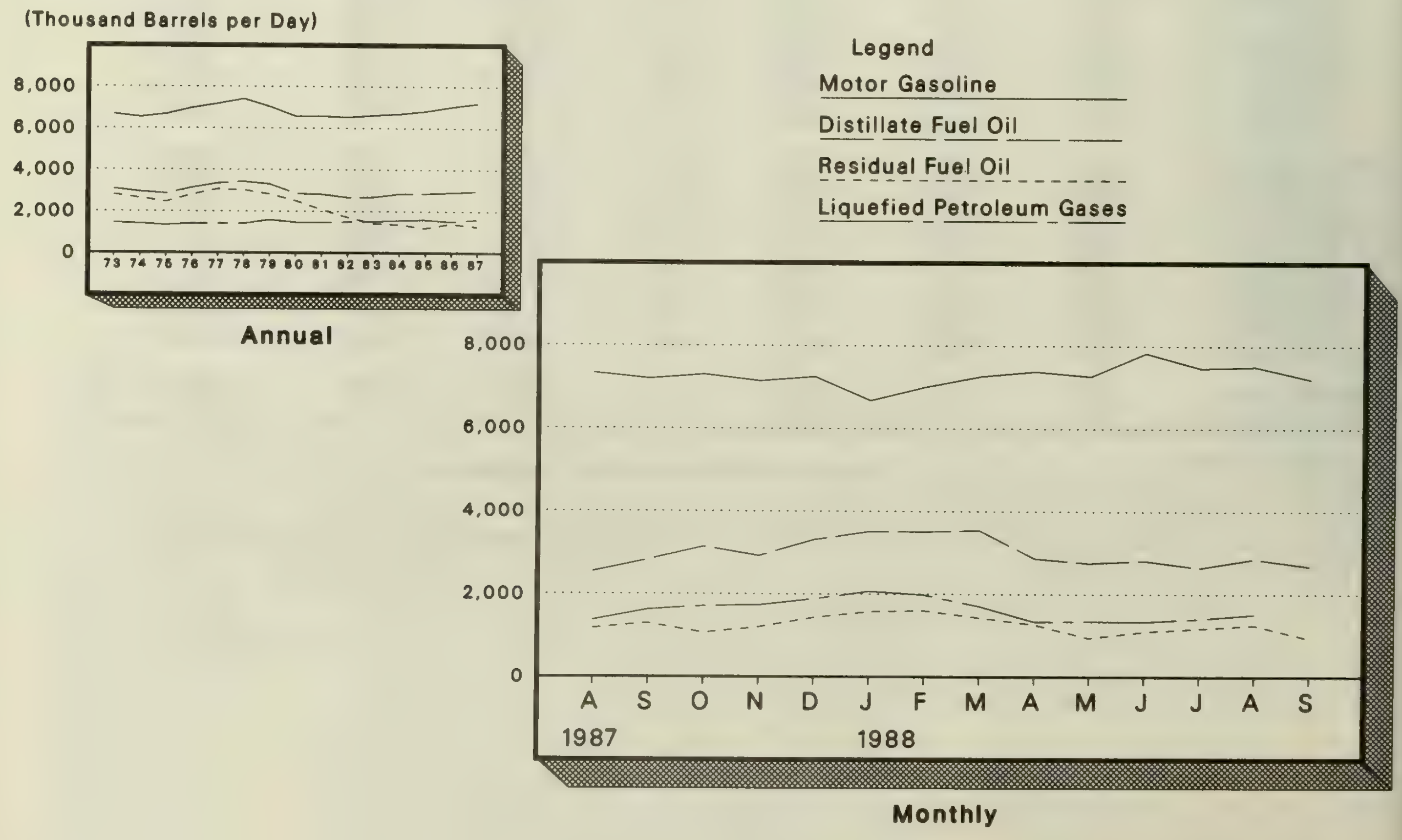
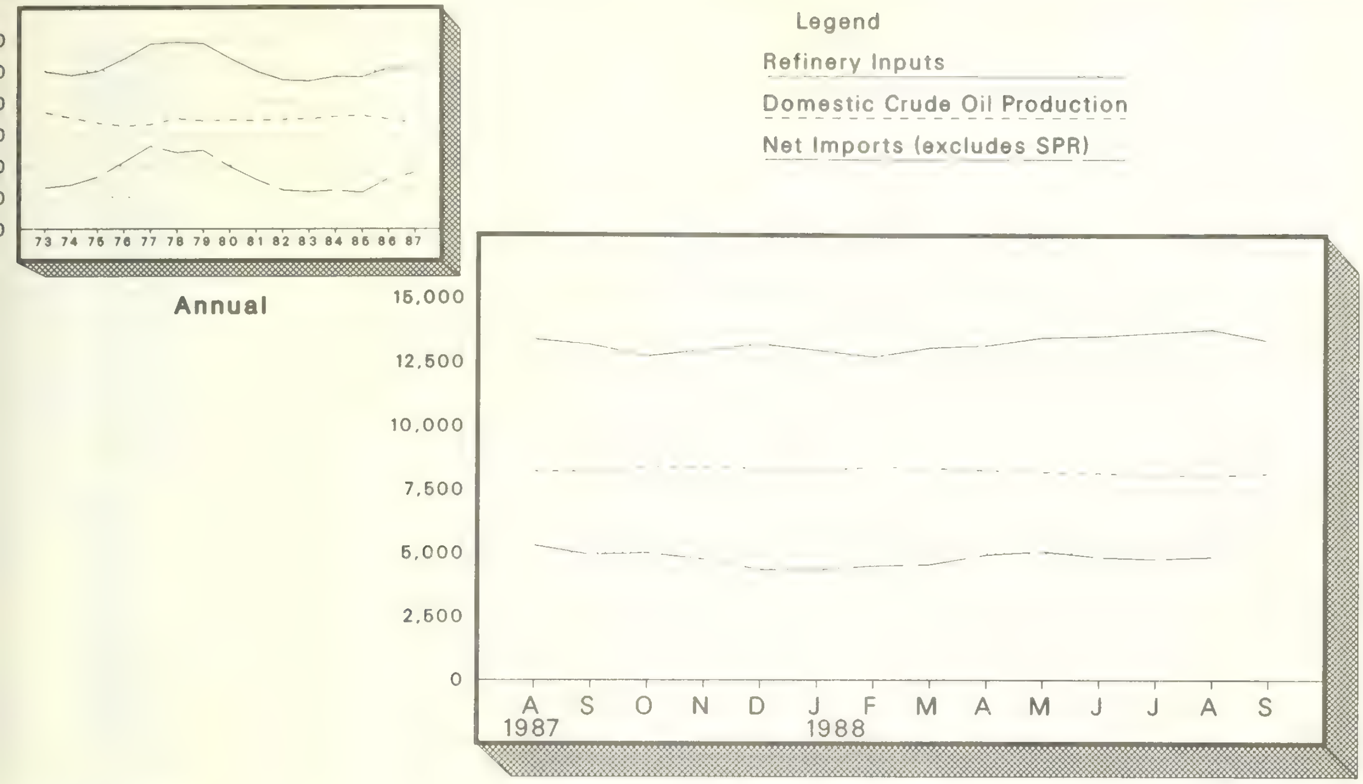


**Figure S2. Petroleum Products Supplied**



ure S3. Crude Oil Supply and Disposition

usand Barrels per Day)

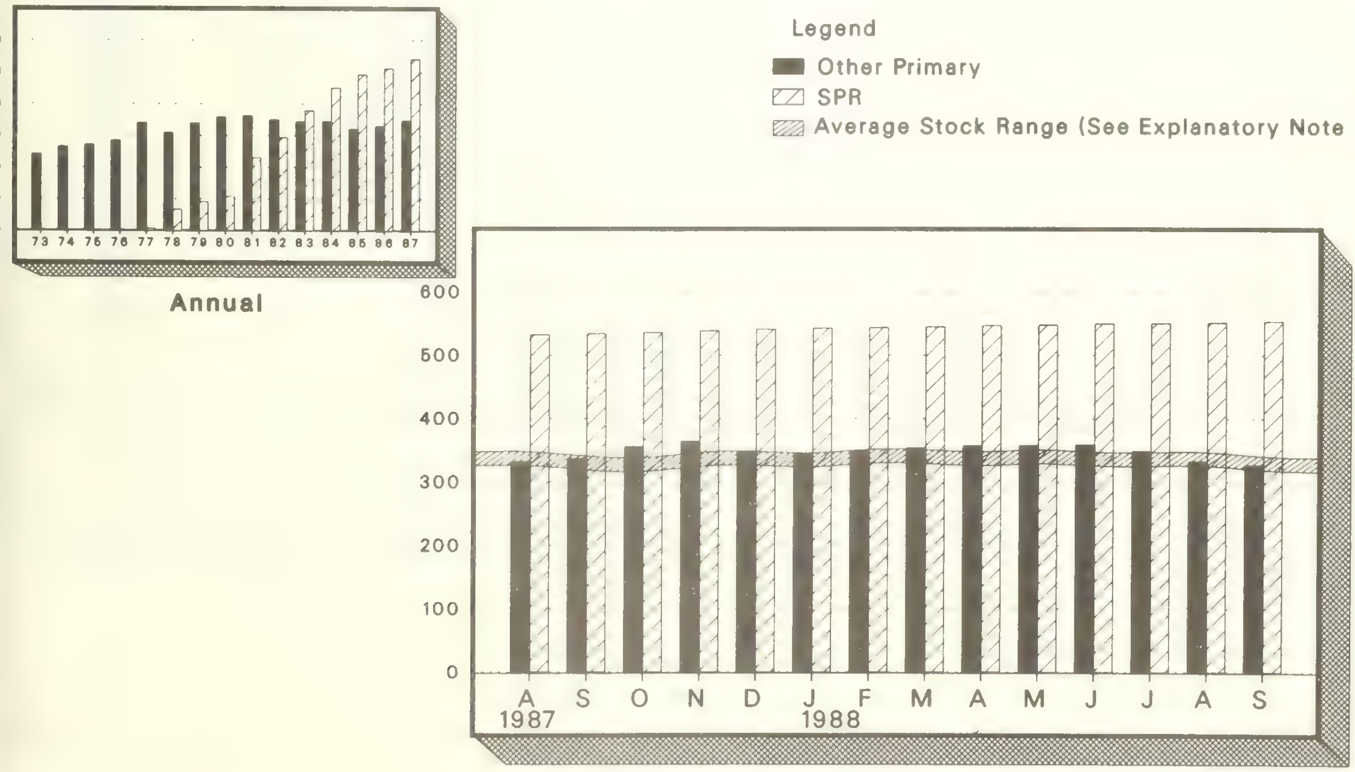


Annual

Monthly

re S4. Crude Oil Ending Stocks

ion Barrels)



Annual

Monthly

## Table S2. Crude Oil[1] Supply and Disposition

| | | Supply | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Field Production | | Imports | | | Stock Withdrawal [3] | | Unaccounted for Crude Oil [5] |
| | | Total Domestic | Alaskan | Total | SPR [4] | Other | SPR [4] | Other | |
| | | Thousand Barrels per Day | | | | | | | |
| 1973 | Average | 9,208 | 198 | 3,244 | – | 3,244 | – | 11 | 3 |
| 1974 | Average | 8,774 | 193 | 3,477 | – | 3,477 | – | -62 | -25 |
| 1975 | Average | 8,375 | 191 | 4,105 | – | 4,105 | – | -17 | 17 |
| 1976 | Average | 8,132 | 173 | 5,287 | – | 5,287 | – | -39 | 77 |
| 1977 | Average | 8,245 | 464 | 6,615 | 21 | 6,594 | -20 | -150 | -6 |
| 1978 | Average | 8,707 | 1,229 | 6,356 | 162 | 6,195 | -163 | 84 | -57 |
| 1979 | Average | 8,552 | 1,401 | 6,519 | 67 | 6,452 | -67 | -81 | -11 |
| 1980 | Average | 8,597 | 1,617 | 5,263 | 44 | 5,219 | -45 | -52 | 34 |
| 1981 | Average | 8,572 | 1,609 | 4,396 | 256 | 4,141 | -336 | [7] 46 | 83 |
| 1982 | Average | 8,649 | 1,695 | 3,488 | 165 | 3,323 | -174 | 38 | 71 |
| 1983 | Average | 8,688 | 1,714 | 3,329 | 234 | 3,096 | -234 | [7] 20 | 114 |
| 1984 | Average | 8,879 | 1,722 | 3,426 | 197 | 3,229 | -195 | -4 | 185 |
| 1985 | Average | 8,971 | 1,825 | 3,201 | 118 | 3,083 | -117 | 67 | 145 |
| 1986 | January | 9,137 | 1,870 | 3,472 | 51 | 3,420 | -35 | -348 | 364 |
| | February | 9,173 | 1,907 | 2,968 | 24 | 2,944 | -35 | -2 | 32 |
| | March | 9,013 | 1,860 | 2,988 | 59 | 2,929 | -49 | -296 | 259 |
| | April | 8,864 | 1,836 | 3,684 | 63 | 3,621 | -63 | 104 | 70 |
| | May | 8,838 | 1,927 | 4,250 | 36 | 4,215 | -35 | 295 | 79 |
| | June | 8,623 | 1,887 | 4,635 | 64 | 4,571 | -64 | 66 | 292 |
| | July | 8,660 | 1,903 | 4,726 | 52 | 4,674 | -52 | -489 | 189 |
| | August | 8,374 | 1,811 | 4,859 | 51 | 4,809 | -51 | 293 | 93 |
| | September | 8,328 | 1,782 | 5,031 | 47 | 4,984 | -47 | -170 | 161 |
| | October | 8,419 | 1,927 | 4,419 | 37 | 4,382 | -36 | -197 | 223 |
| | November | 8,412 | 1,883 | 4,615 | 45 | 4,570 | -65 | 160 | -136 |
| | December | 8,352 | 1,807 | 4,412 | 48 | 4,365 | -68 | 254 | 28 |
| | **Average** | **8,680** | **1,867** | **4,178** | **48** | **4,130** | **-50** | **-28** | **139** |
| 1987 | January | 8,480 | 2,019 | 4,385 | 92 | 4,293 | -108 | -58 | -5 |
| | February | 8,389 | 1,853 | 3,866 | 44 | 3,822 | -64 | 42 | 382 |
| | March | 8,464 | 1,968 | 3,779 | 95 | 3,684 | -106 | -19 | 151 |
| | April | 8,498 | 1,990 | 4,132 | 57 | 4,076 | -67 | 116 | 120 |
| | May | 8,336 | 1,979 | 4,340 | 92 | 4,248 | -101 | 137 | 51 |
| | June | 8,279 | 1,930 | 4,807 | 64 | 4,743 | -69 | -97 | 434 |
| | July | 8,251 | 1,910 | 5,295 | 76 | 5,218 | -91 | 124 | 32 |
| | August | 8,210 | 1,908 | 5,510 | 63 | 5,447 | -63 | -281 | 177 |
| | September | 8,205 | 1,874 | 5,110 | 64 | 5,047 | -64 | -157 | 217 |
| | October | 8,364 | 1,986 | 5,142 | 57 | 5,085 | -57 | -604 | -3 |
| | November | 8,397 | 2,068 | 5,013 | 97 | 4,916 | -97 | -258 | 115 |
| | December | 8,318 | 2,043 | 4,640 | 68 | 4,572 | -68 | 472 | 101 |
| | **Average** | **8,349** | **1,962** | **4,674** | **73** | **4,601** | **-80** | **-49** | **145** |
| 1988 | January | $^{E}$8,245 | $^{E}$1,999 | 4,619 | 67 | 4,552 | -67 | 123 | 303 |
| | February | $^{E}$8,376 | $^{E}$2,070 | 4,692 | 49 | 4,643 | -49 | -81 | -21 |
| | March | $^{E}$8,347 | $^{E}$2,086 | 4,788 | 23 | 4,766 | -26 | -187 | 419 |
| | April | $^{E}$8,268 | $^{E}$2,029 | 5,126 | 78 | 5,049 | -77 | -117 | 126 |
| | May | $^{E}$8,203 | $^{E}$2,016 | 5,234 | 22 | 5,213 | -22 | -19 | 251 |
| | June | $^{E}$8,158 | $^{E}$1,984 | 5,055 | 70 | 4,985 | -70 | -43 | 601 |
| | July | $^{E}$8,059 | $^{E}$1,960 | 5,006 | 42 | 4,965 | -42 | 312 | 548 |
| | August* | $^{RE}$8,063 | $^{RE}$2,009 | $^{R}$5,039 | $^{R}$26 | $^{R}$5,013 | $^{R}$-26 | $^{R}$521 | $^{R}$385 |
| | September** | $^{PE}$8,147 | $^{PE}$2,042 | $^{E}$*5,035* | $^{E}$*67* | $^{E}$*4,969* | $^{E}$*-67* | $^{E}$*274* | $^{E}$160 |
| | **9-Mo. Average** | **$^{PE}$8,206** | **$^{PE}$2,021** | **$^{E}$4,956** | **$^{E}$49** | **$^{E}$4,907** | **$^{E}$-49** | **$^{E}$89** | **$^{E}$310** |
| 1987 | **9-Mo. Average** | **8,346** | **1,938** | **4,587** | **72** | **4,515** | **-82** | **-22** | **170** |
| 1986 | **9-Mo. Average** | **8,776** | **1,865** | **4,076** | **50** | **4,026** | **-48** | **-62** | **173** |

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[1] Includes lease condensate.
[2] Stocks are totals as of end of period.
[3] A negative number indicates an increase in stocks and a positive number indicates a decrease.
[4] Strategic Petroleum Reserve.
[5] A balancing item.
[6] Beginning in January 1983, crude oil used directly as fuel is shown as product supplied.
[7] Stocks of Alaskan crude oil in transit were included beginning in January 1981. Stock withdrawals are calculated using new basis stock levels.

See Explanatory Notes 10 and 11.

Footnotes continued on following page.

## Table S2. Crude Oil[1] Supply and Disposition (Continued)

| | | Supply | Disposition | | | | Ending Stocks[2] | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Crude Used Directly [6] | Crude Losses | Refinery Inputs | Exports | Product Supplied [6] | Total | SPR [4] | Other Primary |
| | | Thousand Barrels per Day | | | | | Million Barrels | | |
| **1973** | **Average** | **-19** | **13** | **12,431** | **2** | **–** | **242** | **–** | **242** |
| **1974** | **Average** | **-15** | **13** | **12,133** | **3** | **–** | **265** | **–** | **265** |
| **1975** | **Average** | **-17** | **13** | **12,442** | **6** | **–** | **271** | **–** | **271** |
| **1976** | **Average** | **-18** | **15** | **13,416** | **8** | **–** | **285** | **–** | **285** |
| **1977** | **Average** | **-14** | **16** | **14,602** | **50** | **–** | **348** | **7** | **340** |
| **1978** | **Average** | **-14** | **16** | **14,739** | **158** | **–** | **376** | **67** | **309** |
| **1979** | **Average** | **-13** | **16** | **14,648** | **235** | **–** | **430** | **91** | **339** |
| **1980** | **Average** | **-13** | **15** | **13,481** | **287** | **–** | [7] **466** | **108** | [7] **358** |
| **1981** | **Average** | **-58** | **5** | **12,470** | **228** | **–** | **594** | **230** | **363** |
| **1982** | **Average** | **-59** | **3** | **11,774** | **236** | **–** | [7] **644** | **294** | [7] **350** |
| **1983** | **Average** | **–** | **2** | **11,685** | **164** | **66** | **723** | **379** | **344** |
| **1984** | **Average** | **–** | **2** | **12,044** | **181** | **64** | **796** | **451** | **345** |
| **1985** | **Average** | **–** | **1** | **12,002** | **204** | **60** | **814** | **493** | **321** |
| **1986** | January | – | 1 | 12,374 | 159 | 57 | 826 | 494 | 332 |
| | February | – | (s) | 11,918 | 162 | 56 | 827 | 495 | 332 |
| | March | – | (s) | 11,652 | 212 | 52 | 838 | 497 | 341 |
| | April | – | (s) | 12,512 | 94 | 51 | 837 | 499 | 338 |
| | May | – | (s) | 13,279 | 98 | 49 | 829 | 500 | 329 |
| | June | – | (s) | 13,261 | 240 | 52 | 828 | 502 | 327 |
| | July | – | (s) | 12,917 | 65 | 51 | 845 | 503 | 342 |
| | August | – | (s) | 13,287 | 233 | 48 | 838 | 505 | 333 |
| | September | – | (s) | 13,097 | 161 | 45 | 844 | 506 | 338 |
| | October | – | (s) | 12,636 | 151 | 41 | 851 | 508 | 344 |
| | November | – | (s) | 12,831 | 115 | 41 | 849 | 509 | 339 |
| | December | – | (s) | 12,777 | 159 | 42 | 843 | 512 | 331 |
| | **Average** | **–** | **(s)** | **12,716** | **154** | **49** | **–** | **–** | **–** |
| **1987** | January | – | 1 | 12,570 | 84 | 41 | 848 | 515 | 333 |
| | February | – | (s) | 12,290 | 284 | 41 | 849 | 517 | 332 |
| | March | – | 1 | 12,081 | 150 | 39 | 852 | 520 | 332 |
| | April | – | (s) | 12,512 | 247 | 41 | 851 | 522 | 329 |
| | May | – | (s) | 12,653 | 69 | 42 | 850 | 525 | 325 |
| | June | – | (s) | 13,202 | 116 | 36 | 855 | 527 | 328 |
| | July | – | (s) | 13,430 | 149 | 32 | 854 | 530 | 324 |
| | August | – | (s) | 13,380 | 141 | 31 | 864 | 532 | 332 |
| | September | – | (s) | 13,168 | 116 | 28 | 871 | 534 | 337 |
| | October | – | (s) | 12,733 | 84 | 25 | 892 | 536 | 356 |
| | November | – | (s) | 12,981 | 164 | 25 | 902 | 539 | 364 |
| | December | – | (s) | 13,212 | 220 | 31 | 890 | 541 | 349 |
| | **Average** | **–** | **(s)** | **12,854** | **151** | **34** | **–** | **–** | **–** |
| **1988** | January | – | (s) | 12,975 | 212 | 36 | 888 | 543 | 345 |
| | February | – | (s) | 12,715 | 149 | 52 | 892 | 544 | 348 |
| | March | – | (s) | 13,072 | 218 | 52 | 899 | 545 | 354 |
| | April | – | (s) | 13,167 | 117 | 42 | 904 | 547 | 357 |
| | May | – | (s) | 13,472 | 141 | 34 | 906 | 548 | 358 |
| | June | – | (s) | 13,528 | 141 | 32 | 909 | 550 | 359 |
| | July | – | (s) | 13,663 | 191 | 29 | 901 | 551 | 349 |
| | August* | – | (s) | [R] 13,797 | [R] 155 | [R] 30 | [R] 885 | 552 | [R] 333 |
| | September** | – | [E] (s) | [E] *13,353* | [E] 166 | [E] 31 | [E] *881* | [E] *554* | [E] *327* |
| | **9-Mo. Average** | **–** | [E] **(s)** | [E] **13,309** | [E] **166** | [E] **37** | **–** | **–** | **–** |
| **1987** | **9-Mo. Average** | **–** | **(s)** | **12,813** | **149** | **37** | **–** | **–** | **–** |
| **1986** | **9-Mo. Average** | **–** | **(s)** | **12,705** | **158** | **51** | **–** | **–** | **–** |

Footnotes continued.

R = Revised data. (s) = Less than 500 barrels per day. E = Estimated. PE = Preliminary estimate. RE = Revised estimate.

* See Explanatory Note 9.2.

** Italics denote estimates based upon preliminary data. See Explanatory Note 8.

Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: See the last page of this section.

## Table S3. Crude Oil and Petroleum Product Imports

| | | Imports from OPEC Sources [1] | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Algeria | Libya | Saudi Arabia[2] | United Arab Emirates | Indo-nesia | Iran | Nigeria | Vene-zuela | Other OPEC [2] | Total OPEC[3] | Total Arab OPEC [4] |
| | | Thousand Barrels per Day | | | | | | | | | | |
| 1973 | **Average** | 136 | 164 | 486 | 71 | 213 | 223 | 459 | 1,135 | 106 | 2,993 | 915 |
| 1974 | **Average** | 190 | 4 | 461 | 74 | 300 | 469 | 713 | 979 | 88 | 3,280 | 752 |
| 1975 | **Average** | 282 | 232 | 715 | 117 | 390 | 280 | 762 | 702 | 122 | 3,601 | 1,383 |
| 1976 | **Average** | 432 | 453 | 1,230 | 254 | 539 | 298 | 1,025 | 700 | 134 | 5,066 | 2,424 |
| 1977 | **Average** | 559 | 723 | 1,380 | 335 | 541 | 535 | 1,143 | 690 | 287 | 6,193 | 3,185 |
| 1978 | **Average** | 649 | 654 | 1,144 | 385 | 573 | 555 | 919 | 645 | 226 | 5,751 | 2,963 |
| 1979 | **Average** | 636 | 658 | 1,356 | 281 | 420 | 304 | 1,080 | 690 | 212 | 5,637 | 3,056 |
| 1980 | **Average** | 488 | 554 | 1,261 | 172 | 348 | 9 | 857 | 481 | 130 | 4,300 | 2,551 |
| 1981 | **Average** | 311 | 319 | 1,129 | 81 | 366 | 0 | 620 | 406 | 90 | 3,323 | 1,848 |
| 1982 | **Average** | 170 | 26 | 552 | 92 | 248 | 35 | 514 | 412 | 97 | 2,146 | 854 |
| 1983 | **Average** | 240 | 0 | 337 | 30 | 338 | 48 | 302 | 422 | 144 | 1,862 | 632 |
| 1984 | **Average** | 323 | 1 | 325 | 117 | 343 | 10 | 216 | 548 | 166 | 2,049 | 819 |
| 1985 | **Average** | 187 | 4 | 168 | 45 | 314 | 27 | 293 | 605 | 187 | 1,830 | 472 |
| 1986 | January | 215 | 0 | 664 | 11 | 290 | 0 | 278 | 629 | 210 | 2,298 | 976 |
| | February | 157 | 0 | 574 | 0 | 290 | (s) | 204 | 518 | 64 | 1,807 | 757 |
| | March | 260 | 0 | 482 | 0 | 161 | 0 | 328 | 797 | 117 | 2,145 | 798 |
| | April | 275 | 0 | 698 | 21 | 292 | 0 | 319 | 831 | 139 | 2,576 | 1,058 |
| | May | 193 | 0 | 574 | 40 | 314 | 40 | 398 | 899 | 290 | 2,749 | 966 |
| | June | 319 | 0 | 662 | 83 | 353 | 0 | 382 | 772 | 439 | 3,010 | 1,377 |
| | July | 310 | 0 | 738 | 59 | 532 | 66 | 542 | 730 | 330 | 3,307 | 1,357 |
| | August | 363 | 0 | 680 | 37 | 274 | 93 | 606 | 916 | 378 | 3,346 | 1,339 |
| | September | 245 | 0 | 810 | 62 | 341 | 31 | 684 | 856 | 356 | 3,383 | 1,388 |
| | October | 305 | 0 | 697 | 147 | 388 | 0 | 530 | 863 | 346 | 3,276 | 1,387 |
| | November | 311 | 0 | 868 | 34 | 335 | 0 | 483 | 843 | 214 | 3,088 | 1,295 |
| | December | 291 | 0 | 769 | 30 | 251 | 0 | 511 | 841 | 284 | 2,976 | 1,223 |
| | **Average** | 271 | 0 | 685 | 44 | 318 | 19 | 440 | 793 | 265 | 2,837 | 1,162 |
| 1987 | January | 156 | 0 | 875 | 15 | 254 | 0 | 346 | 899 | 218 | 2,764 | 1,184 |
| | February | 307 | 0 | 776 | 54 | 418 | 30 | 256 | 791 | 155 | 2,785 | 1,222 |
| | March | 334 | 0 | 430 | 0 | 317 | 73 | 312 | 702 | 135 | 2,305 | 843 |
| | April | 323 | 0 | 463 | 62 | 236 | 47 | 512 | 710 | 77 | 2,430 | 866 |
| | May | 196 | 0 | 499 | 26 | 297 | 75 | 550 | 913 | 119 | 2,675 | 775 |
| | June | 247 | 0 | 782 | 45 | 261 | 165 | 546 | 808 | 268 | 3,122 | 1,275 |
| | July | 347 | 0 | 756 | 42 | 349 | 237 | 792 | 854 | 157 | 3,533 | 1,264 |
| | August | 250 | 0 | 961 | 103 | 312 | 208 | 732 | 831 | 351 | 3,748 | 1,611 |
| | September | 378 | 0 | 902 | 146 | 242 | 193 | 615 | 821 | 263 | 3,560 | 1,640 |
| | October | 274 | 0 | 1,051 | 111 | 305 | 86 | 518 | 829 | 401 | 3,576 | 1,713 |
| | November | 395 | 0 | 637 | 97 | 219 | 41 | 607 | 771 | 402 | 3,169 | 1,477 |
| | December | 339 | 0 | 876 | 31 | 216 | 23 | 613 | 717 | 220 | 3,033 | 1,415 |
| | **Average** | 295 | 0 | 751 | 61 | 285 | 98 | 535 | 804 | 231 | 3,060 | 1,274 |
| 1988 | January | 312 | 0 | 849 | 61 | 179 | [5] 1 | 406 | 752 | 540 | 3,100 | 1,632 |
| | February | 358 | 0 | 1,265 | 79 | 148 | 0 | 501 | 830 | 214 | 3,394 | 1,883 |
| | March | 259 | 0 | 934 | 6 | 123 | 0 | 541 | 790 | 352 | 3,006 | 1,506 |
| | April | 342 | 0 | 931 | 48 | 166 | 0 | 651 | 812 | 385 | 3,335 | 1,613 |
| | May | 320 | 0 | 1,034 | 34 | 298 | 0 | 488 | 835 | 354 | 3,363 | 1,710 |
| | June | 262 | 0 | 923 | 11 | 158 | 0 | 703 | 839 | 495 | 3,391 | 1,603 |
| | July | 193 | 0 | 1,076 | 43 | 198 | 0 | 614 | 706 | 609 | 3,439 | 1,897 |
| | August | 253 | 0 | 1,161 | 0 | 153 | 0 | 557 | 809 | 669 | 3,603 | 2,024 |
| | **8-Mo. Average** | 287 | 0 | 1,020 | 35 | 178 | (s) | 557 | 796 | 454 | 3,328 | 1,733 |
| 1987 | **8-Mo. Average** | 269 | 0 | 692 | 43 | 304 | 105 | 509 | 814 | 186 | 2,923 | 1,129 |
| 1986 | **8-Mo. Average** | 262 | 0 | 635 | 32 | 313 | 25 | 385 | 764 | 248 | 2,664 | 1,081 |

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[1] Excludes petroleum imported into the United States indirectly from members of the Organization of Petroleum Exporting Countries (OPEC), primarily from Caribbean and West European areas, as petroleum products that were refined from crude oil produced by OPEC.

[2] The other members of OPEC are Ecuador, Gabon, Iraq, Kuwait, and Qatar. Prior to January 1988, imports from the Neutral Zone between Kuwait and Saudi Arabia are included in imports from Saudi Arabia. From January 1988 forward, those imports are included in imports from "Other OPEC".

[3] "Total OPEC" consists of Ecuador, Gabon, Indonesia, Iran, Nigeria, and Venezuela, as well as the Arab members. Imports from the Neutral Zone between Kuwait and Saudi Arabia are included in imports from "Total OPEC".

[4] The Arab members of OPEC are Algeria, Iraq, Kuwait, Libya, Qatar, Saudi Arabia, and the United Arab Emirates.

[5] A small amount of Iranian crude oil entered the United States (defined in this publication as the 50 States and the District of Columbia) in January 1988 from the Virgin Islands. This oil originated in Iran and was exported to the Virgin Islands prior to the signing of Executive Order 12613 on October 29, 1987.

Footnotes continued on following page.

# Table S3. Crude Oil and Petroleum Product Imports (Continued)

| | | Imports from Non-OPEC Sources[6] | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Bahamas | Canada | Mexico | Netherlands Antilles | Trinidad and Tobago | United Kingdom | Puerto Rico | Virgin Islands | Other Non-OPEC | Total Non-OPEC | Total Imports |
| | | Thousand Barrels per Day | | | | | | | | | | |
| 1973 | **Average** | 174 | 1,325 | 16 | 585 | 255 | 15 | 99 | 329 | 465 | 3,263 | 6,256 |
| 1974 | **Average** | 164 | 1,070 | 8 | 511 | 251 | 8 | 90 | 391 | 340 | 2,832 | 6,112 |
| 1975 | **Average** | 152 | 846 | 71 | 332 | 242 | 14 | 90 | 406 | 300 | 2,454 | 6,056 |
| 1976 | **Average** | 118 | 599 | 87 | 275 | 274 | 31 | 88 | 422 | 353 | 2,247 | 7,313 |
| 1977 | **Average** | 171 | 517 | 179 | 211 | 289 | 126 | 105 | 466 | 550 | 2,614 | 8,807 |
| 1978 | **Average** | 160 | 467 | 318 | 229 | 253 | 180 | 94 | 429 | 484 | 2,613 | 8,363 |
| 1979 | **Average** | 147 | 538 | 439 | 231 | 190 | 202 | 92 | 431 | 548 | 2,819 | 8,456 |
| 1980 | **Average** | 78 | 455 | 533 | 225 | 176 | 176 | 88 | 388 | 491 | 2,609 | 6,909 |
| 1981 | **Average** | 74 | 447 | 522 | 197 | 133 | 375 | 62 | 327 | 534 | 2,672 | 5,996 |
| 1982 | **Average** | 65 | 482 | 685 | 175 | 112 | 456 | 50 | 316 | 627 | 2,968 | 5,113 |
| 1983 | **Average** | 125 | 547 | 826 | 189 | 96 | 382 | 40 | 282 | 701 | 3,189 | 5,051 |
| 1984 | **Average** | 88 | 630 | 748 | 188 | 94 | 402 | 42 | 294 | 902 | 3,388 | 5,437 |
| 1985 | **Average** | 40 | 770 | 816 | 40 | 113 | 310 | 28 | 247 | 873 | 3,237 | 5,067 |
| 1986 | January | 62 | 823 | 681 | 58 | 108 | 333 | 21 | 326 | 862 | 3,275 | 5,573 |
| | February | 33 | 690 | 557 | 11 | 85 | 218 | 18 | 309 | 949 | 2,870 | 4,676 |
| | March | 18 | 750 | 616 | 27 | 79 | 178 | 25 | 186 | 688 | 2,567 | 4,712 |
| | April | 34 | 798 | 694 | 13 | 111 | 188 | 23 | 209 | 793 | 2,863 | 5,439 |
| | May | 32 | 881 | 743 | 37 | 130 | 365 | 27 | 237 | 1,199 | 3,651 | 6,400 |
| | June | 29 | 753 | 884 | 17 | 167 | 569 | 30 | 233 | 1,157 | 3,838 | 6,848 |
| | July | 44 | 763 | 850 | 25 | 131 | 353 | 29 | 237 | 1,202 | 3,634 | 6,942 |
| | August | 39 | 801 | 738 | 12 | 133 | 584 | 7 | 214 | 1,294 | 3,822 | 7,168 |
| | September | 15 | 801 | 615 | 17 | 162 | 437 | 23 | 291 | 1,345 | 3,706 | 7,090 |
| | October | 38 | 842 | 680 | 26 | 112 | 173 | 21 | 215 | 1,043 | 3,151 | 6,427 |
| | November | 39 | 960 | 565 | 53 | 129 | 448 | 21 | 179 | 1,111 | 3,504 | 6,592 |
| | December | 57 | 809 | 746 | 7 | 148 | 351 | 12 | 291 | 1,304 | 3,724 | 6,700 |
| | **Average** | 37 | 807 | 699 | 25 | 125 | 350 | 21 | 244 | 1,080 | 3,387 | 6,224 |
| 1987 | January | 59 | 799 | 689 | 29 | 100 | 384 | 33 | 327 | 1,170 | 3,589 | 6,353 |
| | February | 56 | 783 | 692 | 23 | 127 | 260 | 24 | 296 | 938 | 3,199 | 5,984 |
| | March | 43 | 738 | 721 | 14 | 124 | 322 | 17 | 247 | 1,262 | 3,489 | 5,794 |
| | April | 43 | 818 | 679 | 12 | 123 | 485 | 24 | 259 | 1,037 | 3,481 | 5,911 |
| | May | 31 | 884 | 541 | 33 | 117 | 392 | 21 | 214 | 1,164 | 3,398 | 6,073 |
| | June | 22 | 912 | 664 | 13 | 114 | 377 | 21 | 281 | 1,242 | 3,646 | 6,769 |
| | July | 46 | 901 | 680 | 71 | 98 | 354 | 17 | 288 | 1,598 | 4,055 | 7,588 |
| | August | 27 | 841 | 577 | 51 | 100 | 289 | 20 | 274 | 1,526 | 3,706 | 7,454 |
| | September | 48 | 846 | 705 | 42 | 105 | 259 | 25 | 271 | 1,318 | 3,618 | 7,178 |
| | October | 26 | 938 | 697 | 16 | 88 | 321 | 17 | 250 | 1,138 | 3,492 | 7,068 |
| | November | 31 | 827 | 627 | 14 | 111 | 456 | 15 | 235 | 1,585 | 3,899 | 7,068 |
| | December | 10 | 883 | 591 | 24 | 73 | 324 | 23 | 327 | 1,543 | 3,800 | 6,833 |
| | **Average** | 37 | 848 | 655 | 29 | 106 | 352 | 21 | 272 | 1,296 | 3,617 | 6,678 |
| 1988 | January | 49 | 953 | 767 | 40 | 104 | 312 | 29 | 341 | 1,205 | 3,800 | 6,900 |
| | February | 58 | 995 | 699 | 21 | 93 | 313 | 16 | 200 | 1,206 | 3,601 | 6,995 |
| | March | 45 | 989 | 745 | 30 | 89 | 461 | 22 | 180 | 1,160 | 3,720 | 6,727 |
| | April | 12 | 975 | 674 | 31 | 82 | 581 | 29 | 193 | 1,137 | 3,714 | 7,050 |
| | May | 17 | 990 | 718 | 38 | 102 | 383 | 20 | 243 | 1,345 | 3,855 | 7,218 |
| | June | 25 | 1,022 | 765 | 19 | 112 | 232 | 13 | 212 | 1,094 | 3,494 | 6,885 |
| | July | 15 | 962 | 723 | 35 | 96 | 208 | 22 | 215 | 1,280 | 3,556 | 6,994 |
| | August | 12 | 1,003 | 692 | 20 | 97 | 104 | 7 | 172 | 1,465 | 3,571 | 7,174 |
| | **8-Mo. Average** | 29 | 986 | 723 | 29 | 97 | 324 | 20 | 220 | 1,238 | 3,665 | 6,993 |
| 1987 | **8-Mo. Average** | 41 | 835 | 655 | 31 | 113 | 358 | 22 | 273 | 1,247 | 3,575 | 6,498 |
| 1986 | **8-Mo. Average** | 36 | 784 | 722 | 25 | 118 | 350 | 23 | 243 | 1,019 | 3,320 | 5,984 |

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Footnotes continued.

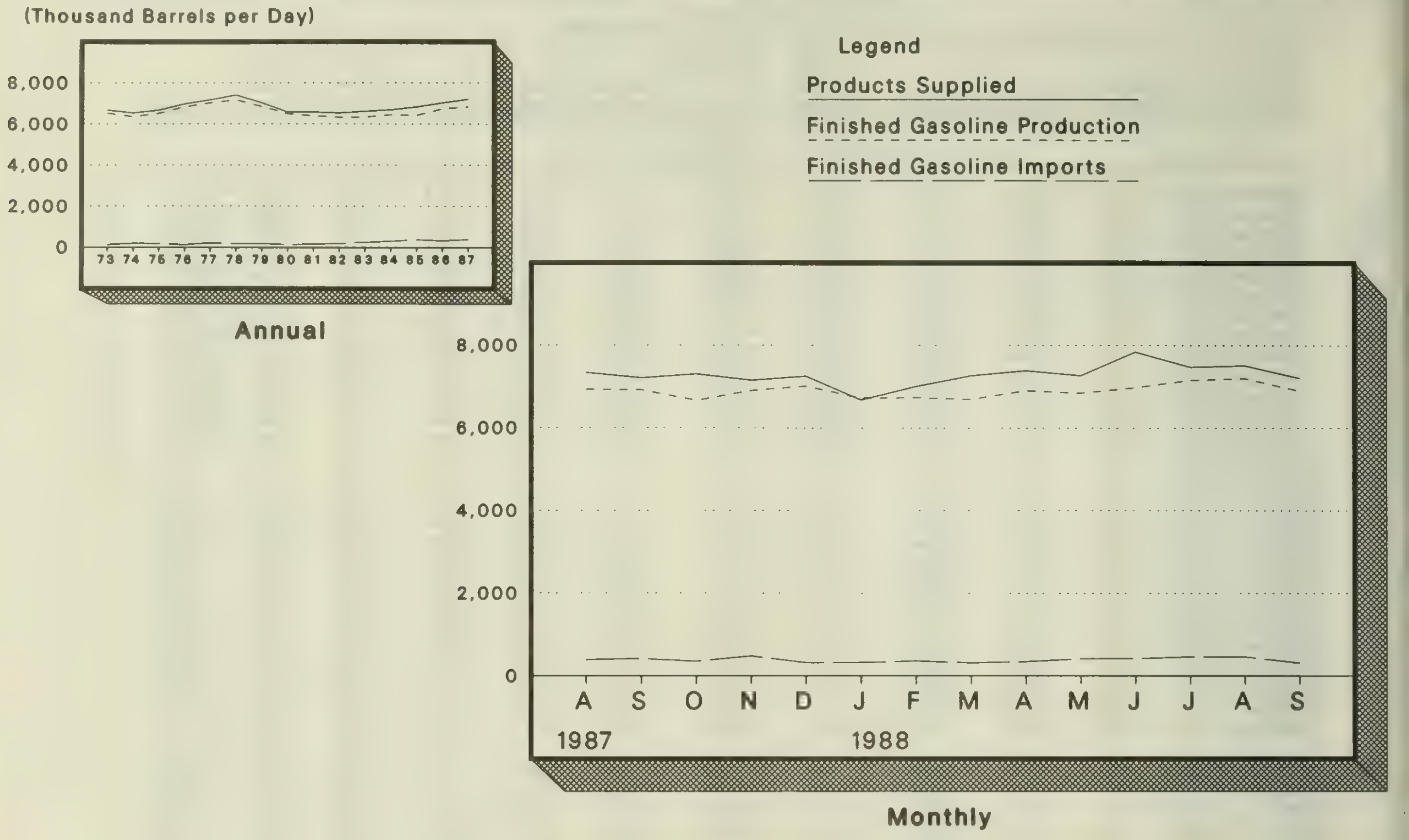
[6] Includes petroleum imported into the United States indirectly from members of OPEC, primarily from Caribbean and West European areas as petroleum products that were refined from crude oil produced by OPEC.

(s) = Less than 500 barrels per day.

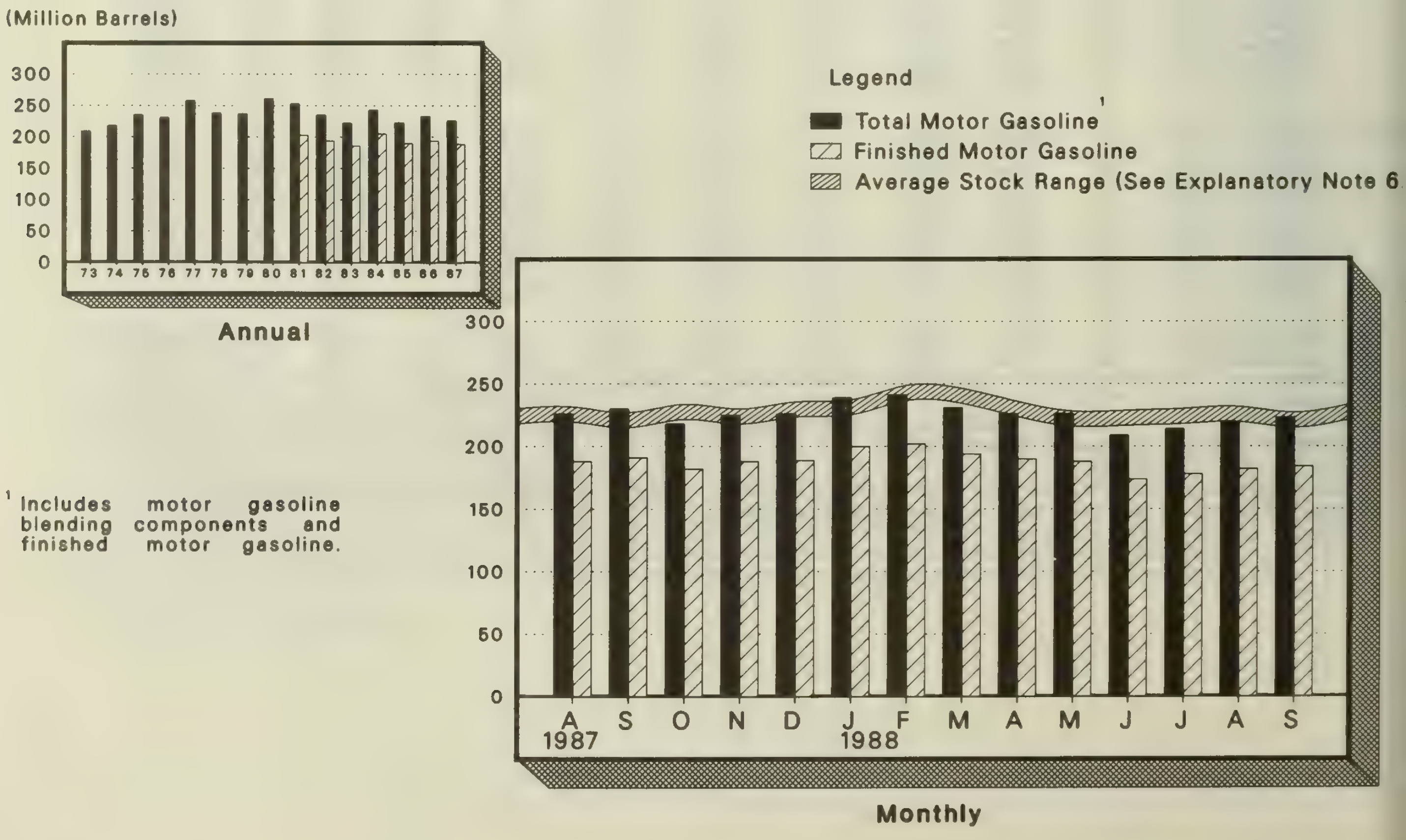
Notes: • Beginning in October 1977, Strategic Petroleum Reserve imports are included. • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: See the last page of this section.

## Figure S5. Finished Motor Gasoline Supply and Disposition



## Figure S6. Motor Gasoline Ending Stocks



[1] Includes motor gasoline blending components and finished motor gasoline.

## Table S4. Finished Motor Gasoline Supply and Disposition

| | | Supply | | | Disposition | | | | Ending Stocks [1] | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Product Supplied | | | | |
| | | Total Production | Imports [2] | Stock Withdrawal [2,3] | Exports | Total [4] | Unleaded | Unleaded | Total Motor Gasoline [5] | Finished Motor Gasoline |
| | | Thousand Barrels per Day | | | | | | Percent of Total | Million Barrels | |
| 1973 | **Average** | **6,535** | **134** | **9** | **4** | **6,674** | -- | -- | 209 | -- |
| 1974 | **Average** | **6,360** | **204** | **-24** | **2** | **6,537** | -- | -- | [6] 218 | -- |
| 1975 | **Average** | **6,520** | **184** | [6] **-28** | **2** | **6,675** | -- | -- | 235 | -- |
| 1976 | **Average** | **6,841** | **131** | **10** | **3** | **6,978** | -- | -- | 231 | -- |
| 1977 | **Average** | **7,033** | **217** | **-72** | **2** | **7,177** | **1,976** | **27.5** | 258 | -- |
| 1978 | **Average** | **7,169** | **190** | **54** | **1** | **7,412** | **2,521** | **34.0** | 238 | -- |
| 1979 | **Average** | **6,852** | **181** | **2** | (s) | **7,034** | **2,798** | **39.8** | 237 | -- |
| 1980 | **Average** | **6,506** | **140** | **-66** | **1** | **6,579** | **3,067** | **46.6** | [6] 261 | -- |
| 1981 | **Average**[7] | **6,405** | **157** | [6] **28** | **2** | **6,588** | **3,264** | **49.5** | 253 | -- |
| 1982 | **Average** | **6,338** | **197** | **25** | **20** | **6,539** | **3,409** | **52.1** | [6] 235 | -- |
| 1983 | **Average** | **6,340** | **247** | [6] **45** | **10** | **6,622** | **3,647** | **55.1** | 222 | 186 |
| 1984 | **Average** | **6,453** | **299** | **-54** | **6** | **6,693** | **3,987** | **59.6** | 243 | 205 |
| 1985 | **Average** | **6,419** | **381** | **41** | **10** | **6,831** | **4,406** | **64.5** | 223 | 190 |
| 1986 | January | 6,522 | 332 | -347 | 6 | 6,502 | 4,404 | 67.7 | 238 | 201 |
| | February | 6,302 | 334 | -156 | 11 | 6,469 | 4,365 | 67.5 | 244 | 205 |
| | March | 6,061 | 224 | 691 | 21 | 6,955 | 4,678 | 67.3 | 219 | 184 |
| | April | 6,498 | 291 | 338 | 23 | 7,105 | 4,783 | 67.3 | 207 | 174 |
| | May | 7,095 | 471 | -450 | 9 | 7,106 | 4,729 | 66.5 | 221 | 188 |
| | June | 7,101 | 392 | -265 | 18 | 7,209 | 4,914 | 68.2 | 230 | 196 |
| | July | 6,956 | 337 | 189 | 47 | 7,436 | 5,182 | 69.7 | 224 | 190 |
| | August | 7,092 | 303 | 83 | 43 | 7,435 | 5,138 | 69.1 | 222 | 187 |
| | September | 6,891 | 303 | -289 | 40 | 6,864 | 4,813 | 70.1 | 234 | 196 |
| | October | 6,616 | 322 | 372 | 61 | 7,250 | 5,086 | 70.1 | 222 | 184 |
| | November | 6,895 | 280 | -200 | 96 | 6,879 | 4,918 | 71.5 | 229 | 190 |
| | December | 6,970 | 320 | -122 | 24 | 7,143 | 5,193 | 72.7 | 233 | 194 |
| | **Average** | **6,752** | **326** | **-11** | **33** | **7,034** | **4,854** | **69.0** | -- | -- |
| 1987 | January | 6,714 | 393 | -528 | 44 | 6,535 | 4,822 | 73.8 | 251 | 211 |
| | February | 6,365 | 309 | 144 | 22 | 6,796 | 5,068 | 74.6 | 250 | 207 |
| | March | 6,569 | 364 | 51 | 20 | 6,964 | 5,193 | 74.6 | 248 | 205 |
| | April | 6,850 | 374 | 133 | 42 | 7,314 | 5,405 | 73.9 | 242 | 201 |
| | May | 6,991 | 354 | 164 | 48 | 7,460 | 5,569 | 74.7 | 235 | 196 |
| | June | 7,089 | 385 | 111 | 46 | 7,539 | 5,678 | 75.3 | 230 | 193 |
| | July | 7,043 | 452 | 119 | 33 | 7,581 | 5,740 | 75.7 | 226 | 189 |
| | August | 6,933 | 396 | 29 | 19 | 7,338 | 5,656 | 77.1 | 226 | 188 |
| | September | 6,921 | 421 | -107 | 30 | 7,205 | 5,536 | 76.8 | 230 | 191 |
| | October | 6,668 | 356 | 302 | 21 | 7,305 | 5,636 | 77.1 | 218 | 182 |
| | November | 6,907 | 484 | -208 | 32 | 7,151 | 5,589 | 78.2 | 225 | 188 |
| | December | 7,015 | 320 | -24 | 59 | 7,251 | 5,715 | 78.8 | 226 | 189 |
| | **Average** | **6,841** | **384** | **15** | **35** | **7,206** | **5,470** | **75.9** | – | – |
| 1988 | January | 6,723 | 324 | -361 | 8 | 6,679 | 5,392 | 80.7 | 239 | 200 |
| | February | 6,736 | 365 | -78 | 18 | 7,004 | 5,571 | 79.5 | 241 | 202 |
| | March | 6,695 | 318 | 271 | 18 | 7,265 | 5,845 | 80.4 | 231 | 194 |
| | April | 6,906 | 349 | 148 | 18 | 7,384 | 5,946 | 80.5 | 226 | 190 |
| | May | 6,847 | 415 | 34 | 28 | 7,269 | 5,813 | 80.0 | 226 | 188 |
| | June | 6,983 | 424 | 490 | 59 | 7,838 | 6,356 | 81.1 | 209 | 174 |
| | July | 7,159 | 461 | -135 | 12 | 7,473 | 6,126 | 82.0 | 214 | 178 |
| | August* | R 7,204 | R 465 | R -142 | R 15 | R 7,511 | R 6,191 | R 82.4 | R 219 | R 182 |
| | September** | E *6,900* | E *314* | E *27* | E 35 | E *7,206* | E *5,954* | E *82.6* | E *223* | E *184* |
| | **9-Mo. Average** | E **6,907** | E **382** | E **27** | E **23** | E **7,292** | E **5,911** | E **81.1** | – | – |
| 1987 | **9-Mo. Average** | **6,834** | **384** | **11** | **34** | **7,195** | **5,410** | **75.2** | – | – |
| 1986 | **9-Mo. Average** | **6,727** | **332** | **-21** | **24** | **7,014** | **4,782** | **68.2** | – | – |

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[1] Stocks are totals as of end of period.

[2] Beginning in 1981, excludes blending components.

[3] A negative number indicates an increase in stocks and a positive number indicates a decrease.

[4] Includes gasohol.

[5] Includes motor gasoline blending components.

[6] In January 1975, 1981, and 1983, numerous respondents were added to surveys affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10.

[7] Beginning in January 1981, survey forms were modified. See Explanatory Note 12.

R = Revised data. (s) = Less than 500 barrels per day. E = Estimated.

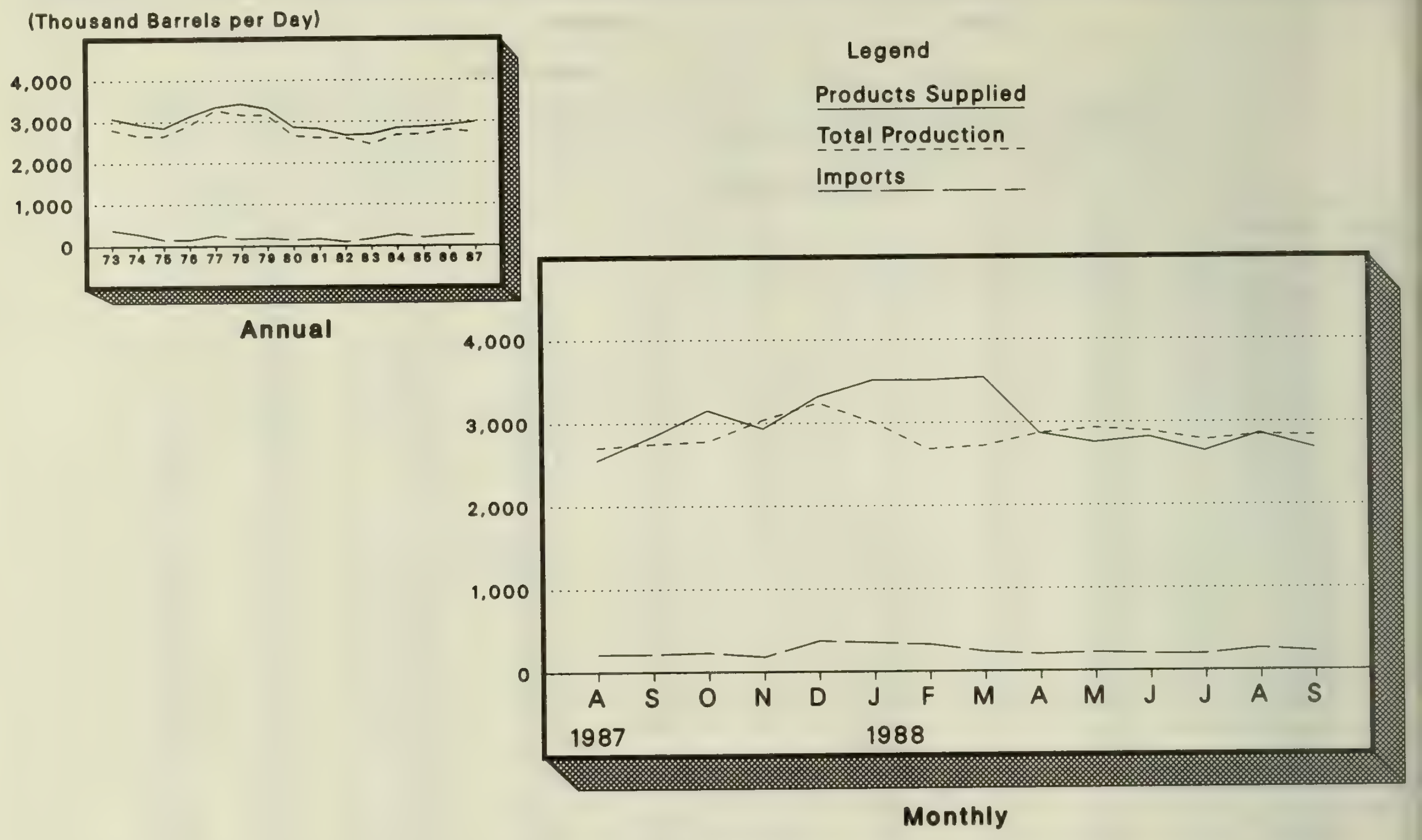
* See Explanatory Note 9.3.

** Italics denote estimates based upon preliminary data. See Explanatory Note 8.

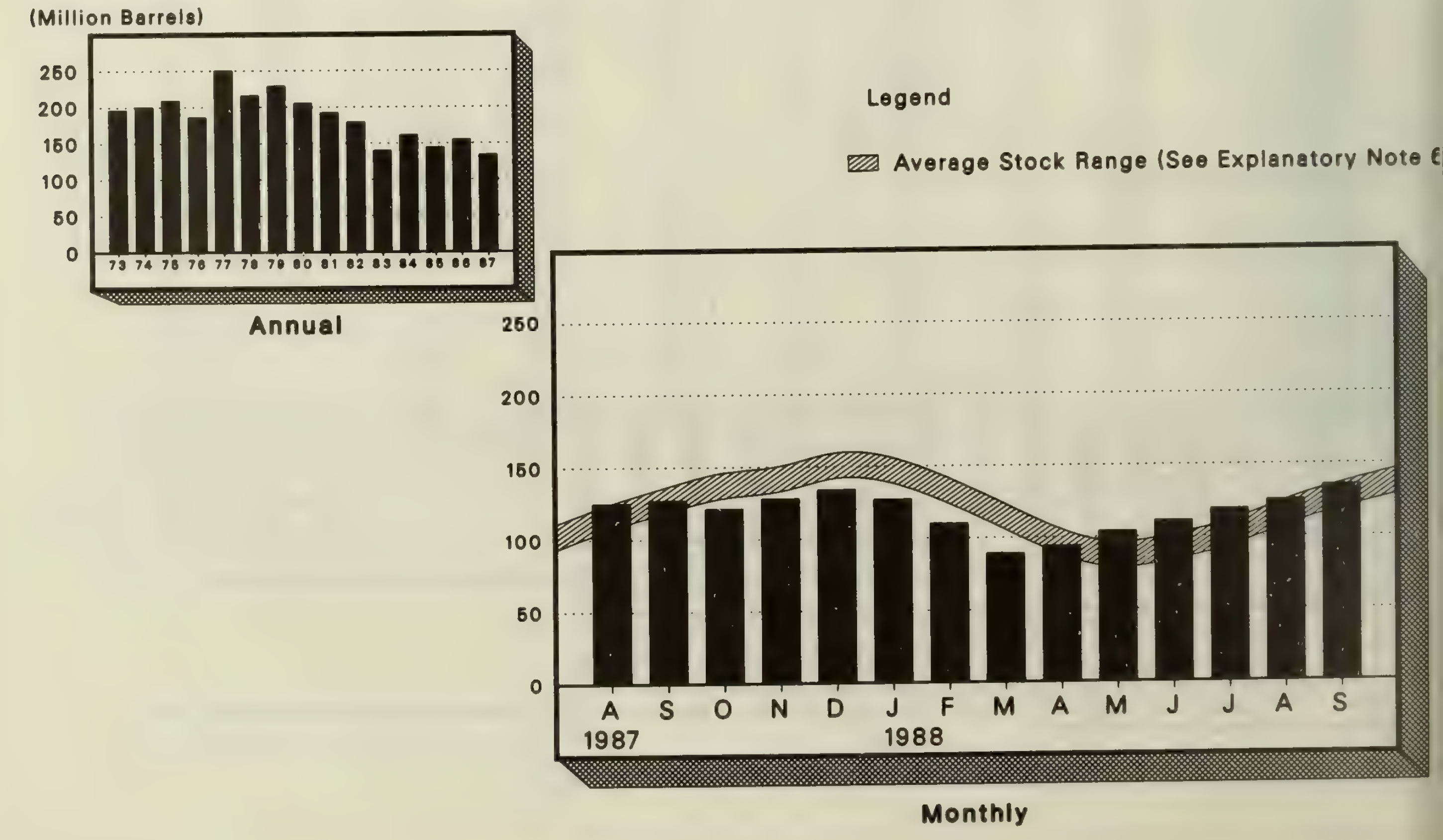
Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: See the last page of this section.

## Figure S7. Distillate Fuel Oil Supply and Disposition



## Figure S8. Distillate Fuel Oil Ending Stocks



# Table S5. Distillate Fuel Oil Supply and Disposition

| | | Supply | | | | Disposition | | |
|---|---|---|---|---|---|---|---|---|
| | | Total Production | Imports | Stock Withdrawal [1] | Crude Used Directly [2] | Exports | Product Supplied [2] | Ending Stocks [3] |
| | | Thousand Barrels per Day | | | | | | Million Barrels |
| 1973 | **Average** ........... | **2,822** | **392** | **-115** | **2** | **9** | **3,092** | **196** |
| 1974 | **Average** ........... | **2,669** | **289** | **-9** | **2** | **2** | **2,948** | **[4] 200** |
| 1975 | **Average** ........... | **2,654** | **155** | **[4] 40** | **2** | **1** | **2,851** | **209** |
| 1976 | **Average** ........... | **2,924** | **146** | **62** | **1** | **1** | **3,133** | **186** |
| 1977 | **Average** ........... | **3,278** | **250** | **-176** | **1** | **1** | **3,352** | **250** |
| 1978 | **Average** ........... | **3,167** | **173** | **93** | **1** | **3** | **3,432** | **216** |
| 1979 | **Average** ........... | **3,153** | **193** | **-34** | **1** | **3** | **3,311** | **229** |
| 1980 | **Average** ........... | **2,662** | **142** | **64** | **1** | **3** | **2,866** | **[4] 205** |
| 1981 | **Average**[5] ........... | **2,613** | **173** | **[4] 38** | **10** | **5** | **2,829** | **192** |
| 1982 | **Average** ........... | **2,606** | **93** | **35** | **10** | **74** | **2,671** | **[4] 179** |
| 1983 | **Average** ........... | **2,456** | **174** | **[4] 124** | **--** | **64** | **2,690** | **140** |
| 1984 | **Average** ........... | **2,681** | **272** | **-57** | **--** | **51** | **2,845** | **161** |
| 1985 | **Average** ........... | **2,687** | **200** | **48** | **--** | **67** | **2,868** | **144** |
| 1986 | January ................. | 2,899 | 325 | 232 | -- | 126 | 3,330 | 136 |
| | February ................ | 2,563 | 169 | 860 | -- | 176 | 3,416 | 112 |
| | March .................... | 2,643 | 217 | 438 | -- | 131 | 3,168 | 99 |
| | April ....................... | 2,788 | 147 | 97 | -- | 128 | 2,904 | 96 |
| | May ....................... | 2,858 | 149 | -95 | -- | 149 | 2,762 | 99 |
| | June ...................... | 2,729 | 169 | -301 | -- | 53 | 2,544 | 108 |
| | July ........................ | 2,710 | 313 | -355 | -- | 75 | 2,592 | 119 |
| | August ................... | 2,922 | 370 | -607 | -- | 64 | 2,621 | 138 |
| | September ............ | 2,865 | 262 | -489 | -- | 98 | 2,540 | 152 |
| | October ................. | 2,717 | 243 | 25 | -- | 74 | 2,912 | 152 |
| | November ............. | 2,917 | 254 | -222 | -- | 72 | 2,877 | 158 |
| | December ............. | 2,943 | 339 | 102 | -- | 55 | 3,329 | 155 |
| | **Average** ........... | **2,798** | **247** | **-31** | **--** | **100** | **2,914** | **--** |
| 1987 | January ................. | 2,759 | 222 | 444 | -- | 115 | 3,310 | 141 |
| | February ............... | 2,556 | 253 | 629 | -- | 93 | 3,345 | 124 |
| | March .................... | 2,421 | 297 | 464 | -- | 67 | 3,116 | 109 |
| | April ....................... | 2,553 | 192 | 300 | -- | 53 | 2,991 | 100 |
| | May ....................... | 2,563 | 203 | -31 | -- | 51 | 2,684 | 101 |
| | June ...................... | 2,689 | 265 | -104 | -- | 61 | 2,790 | 104 |
| | July ....................... | 2,700 | 381 | -329 | -- | 38 | 2,713 | 115 |
| | August ................... | 2,706 | 222 | -327 | -- | 47 | 2,553 | 125 |
| | September ............ | 2,748 | 222 | -68 | -- | 64 | 2,838 | 127 |
| | October ................. | 2,780 | 237 | 187 | -- | 53 | 3,151 | 121 |
| | November ............. | 3,035 | 187 | -234 | -- | 56 | 2,932 | 128 |
| | December ............. | 3,242 | 378 | -209 | -- | 92 | 3,318 | 134 |
| | **Average** ........... | **2,731** | **255** | **56** | **--** | **66** | **2,976** | **--** |
| 1988 | January ................. | 3,008 | 355 | 236 | -- | 82 | 3,517 | 127 |
| | February .............. | 2,683 | 330 | 604 | -- | 107 | 3,511 | 110 |
| | March .................... | 2,720 | 243 | 656 | -- | 74 | 3,544 | 89 |
| | April ....................... | 2,869 | 208 | -166 | -- | 42 | 2,870 | 94 |
| | May ...................... | 2,931 | 228 | -328 | -- | 74 | 2,757 | 104 |
| | June ...................... | 2,893 | 209 | -207 | -- | 76 | 2,820 | 111 |
| | July ....................... | 2,783 | 205 | -283 | -- | 58 | 2,647 | 119 |
| | August* ................ | R 2,844 | R 270 | R -186 | -- | R 70 | R 2,860 | 125 |
| | September** ......... | E *2,837* | E *230* | E *-318* | -- | E 67 | E *2,682* | E *135* |
| | **9-Mo. Average** ..... | **E 2,842** | **E 253** | **E -1** | **--** | **E 72** | **E 3,022** | **--** |
| 1987 | **9-Mo. Average** ..... | **2,633** | **251** | **104** | **--** | **65** | **2,923** | **--** |
| 1986 | **9-Mo. Average** ..... | **2,777** | **237** | **-32** | **--** | **111** | **2,872** | **--** |

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[1] A negative number indicates an increase in stocks and a positive number indicates a decrease.

[2] Beginning in January 1983, product supplied for distillate fuel oil does not include crude oil used directly. See Explanatory Note 4.

[3] Stocks are totals as of end of period.

[4] In January 1975, 1981, and 1983, numerous respondents were added to surveys affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10.

[5] Beginning in January 1981, survey forms were modified. See Explanatory Note 12.

R = Revised data. (s) = Less than 500 barrels per day. E = Estimated.

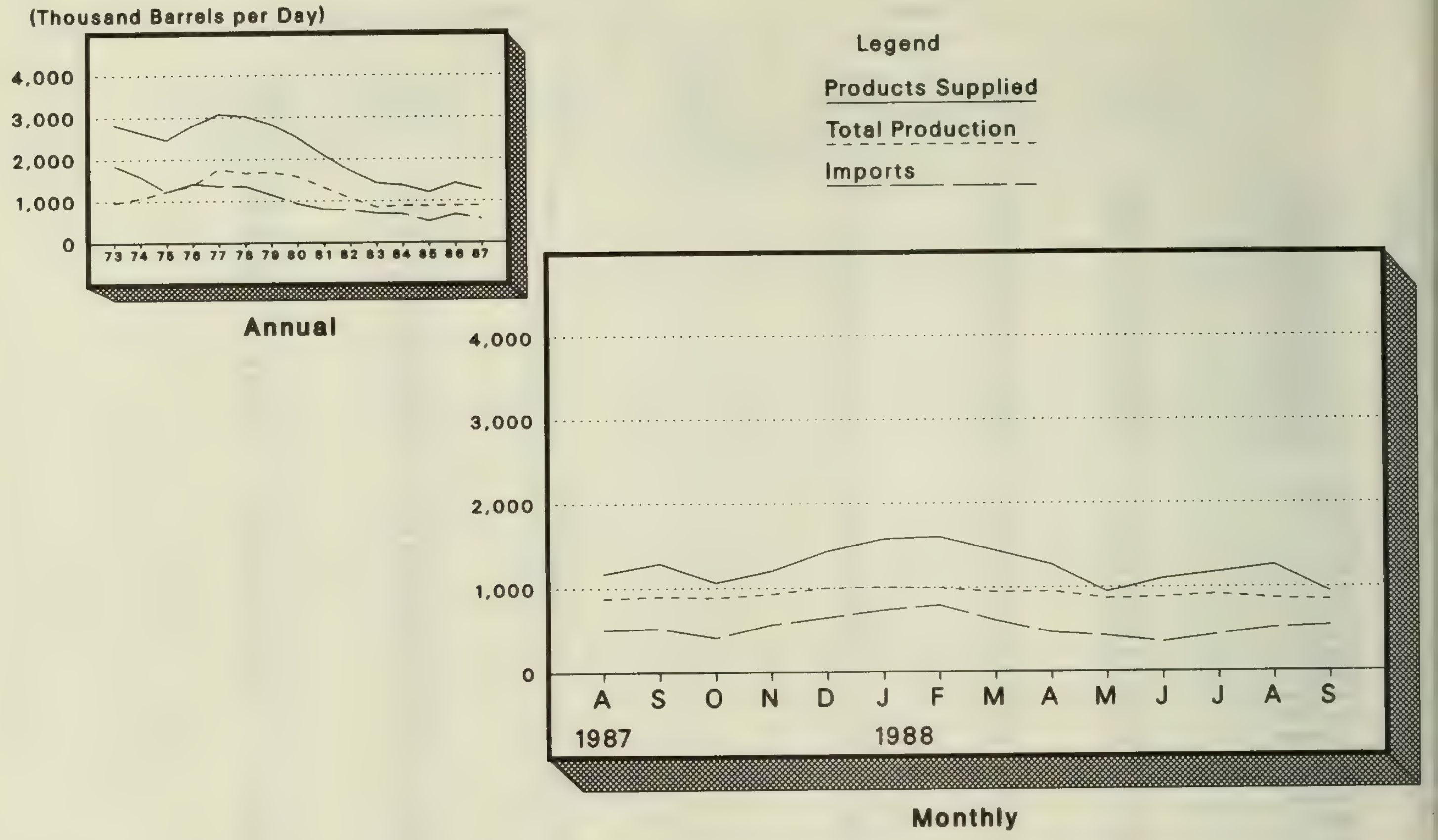
* See Explanatory Note 9.4.

** Italics denote estimates based upon preliminary data. See Explanatory Note 8.

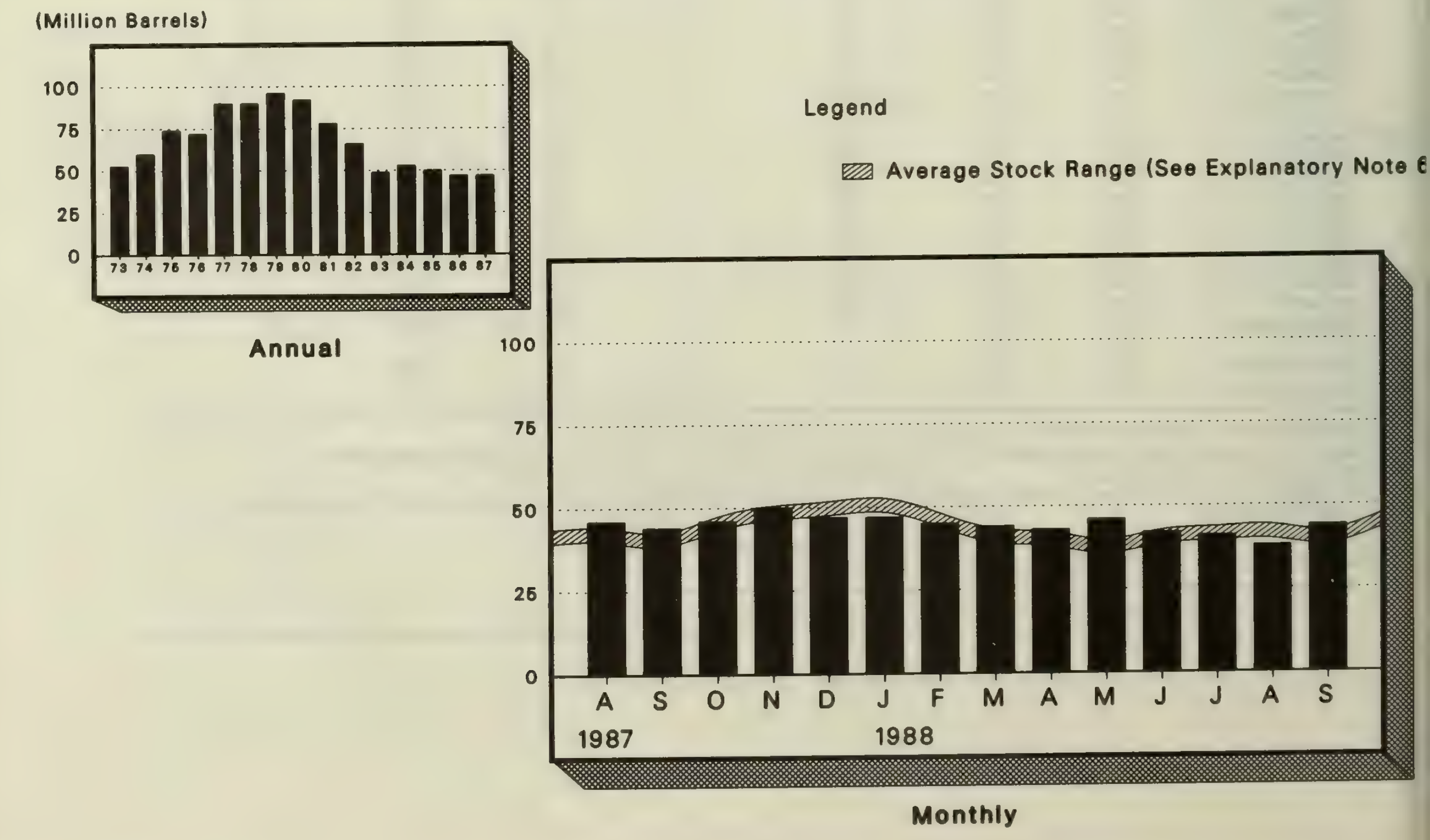
Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: See the last page of this section.

## Figure S9. Residual Fuel Oil Supply and Disposition



## Figure S10. Residual Fuel Oil Ending Stocks



# Table S6. Residual Fuel Oil Supply and Disposition

| | | Supply | | | | Disposition | | |
|---|---|---|---|---|---|---|---|---|
| | | Total Production | Imports | Stock Withdrawal [1] | Crude Used Directly [2] | Exports | Product Supplied [2] | Ending Stocks [3] |
| | | Thousand Barrels per Day | | | | | | Million Barrels |
| **1973** | **Average** | **971** | **1,853** | **5** | **17** | **23** | **2,822** | **53** |
| **1974** | **Average** | **1,070** | **1,587** | **-17** | **13** | **14** | **2,639** | **[4] 60** |
| **1975** | **Average** | **1,235** | **1,223** | **[4] 2** | **15** | **15** | **2,462** | **74** |
| **1976** | **Average** | **1,377** | **1,413** | **5** | **17** | **12** | **2,801** | **72** |
| **1977** | **Average** | **1,754** | **1,359** | **-48** | **13** | **6** | **3,071** | **90** |
| **1978** | **Average** | **1,667** | **1,355** | **-1** | **13** | **13** | **3,023** | **90** |
| **1979** | **Average** | **1,687** | **1,151** | **-15** | **12** | **9** | **2,826** | **96** |
| **1980** | **Average** | **1,580** | **939** | **10** | **12** | **33** | **2,508** | **[4] 92** |
| **1981** | **Average[5]** | **1,321** | **800** | **[4] 37** | **48** | **118** | **2,088** | **78** |
| **1982** | **Average** | **1,070** | **776** | **32** | **48** | **209** | **1,716** | **[4] 66** |
| **1983** | **Average** | **852** | **699** | **[4] 55** | **–** | **185** | **1,421** | **49** |
| **1984** | **Average** | **891** | **681** | **-12** | **–** | **190** | **1,369** | **53** |
| **1985** | **Average** | **882** | **510** | **7** | **–** | **197** | **1,202** | **50** |
| **1986** | January | 940 | 622 | 56 | -- | 211 | 1,407 | 49 |
| | February | 856 | 604 | 200 | -- | 183 | 1,478 | 43 |
| | March | 813 | 626 | 108 | -- | 113 | 1,435 | 40 |
| | April | 933 | 545 | 127 | -- | 202 | 1,402 | 36 |
| | May | 913 | 675 | -114 | -- | 129 | 1,345 | 39 |
| | June | 818 | 712 | -111 | -- | 43 | 1,377 | 43 |
| | July | 850 | 673 | 75 | -- | 90 | 1,508 | 40 |
| | August | 896 | 793 | -29 | -- | 174 | 1,485 | 41 |
| | September | 854 | 641 | -89 | -- | 110 | 1,296 | 44 |
| | October | 827 | 635 | -59 | -- | 144 | 1,259 | 46 |
| | November | 975 | 574 | -15 | -- | 143 | 1,391 | 46 |
| | December | 987 | 913 | -37 | -- | 224 | 1,638 | 47 |
| | **Average** | **889** | **669** | **8** | **–** | **147** | **1,418** | **–** |
| **1987** | January | 920 | 701 | 81 | -- | 198 | 1,504 | 45 |
| | February | 825 | 668 | 243 | -- | 221 | 1,515 | 38 |
| | March | 863 | 559 | -38 | -- | 150 | 1,234 | 39 |
| | April | 831 | 476 | 114 | -- | 239 | 1,182 | 36 |
| | May | 813 | 505 | -145 | -- | 144 | 1,029 | 40 |
| | June | 864 | 481 | -33 | -- | 105 | 1,207 | 41 |
| | July | 901 | 721 | -108 | -- | 175 | 1,339 | 45 |
| | August | 882 | 512 | -32 | -- | 185 | 1,176 | 46 |
| | September | 904 | 526 | 42 | -- | 177 | 1,296 | 44 |
| | October | 887 | 414 | -39 | -- | 194 | 1,069 | 46 |
| | November | 928 | 568 | -145 | -- | 146 | 1,205 | 50 |
| | December | 1,001 | 650 | 83 | -- | 300 | 1,434 | 47 |
| | **Average** | **885** | **565** | **(s)** | **–** | **186** | **1,264** | **–** |
| **1988** | January | 1,009 | 737 | 23 | -- | 190 | 1,578 | 47 |
| | February | 997 | 792 | 40 | -- | 229 | 1,601 | 45 |
| | March | 944 | 610 | 45 | -- | 165 | 1,434 | 44 |
| | April | 951 | 465 | 27 | -- | 170 | 1,272 | 43 |
| | May | 866 | 423 | -81 | -- | 263 | 945 | 46 |
| | June | 881 | 349 | 121 | -- | 249 | 1,102 | 42 |
| | July | 913 | 436 | 34 | -- | 206 | 1,177 | 41 |
| | August* | R 863 | R 515 | R 104 | -- | R 225 | R 1,258 | 38 |
| | September** | E *843* | E *538* | E *-213* | -- | E 228 | E *940* | E *44* |
| | **9-Mo. Average** | **E 918** | **E 540** | E 11 | **–** | **E 214** | **E 1,256** | – |
| **1987** | **9-Mo. Average** | **867** | **572** | **11** | **–** | **177** | **1,274** | **–** |
| **1986** | **9-Mo. Average** | **875** | **656** | **23** | **–** | **139** | **1,415** | **–** |

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[1] A negative number indicates an increase in stocks and a positive number indicates a decrease.

[2] Beginning in January 1983, product supplied for residual fuel oil does not include crude oil used directly. See Explanatory Note 4.

[3] Stocks are totals as of end of period.

[4] In January 1975, 1981, and 1983, numerous respondents were added to surveys affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10.

[5] Beginning in January 1981, survey forms were modified. See Explanatory Note 12.

R = Revised data. (s) = Less than 500 barrels per day. E = Estimated.

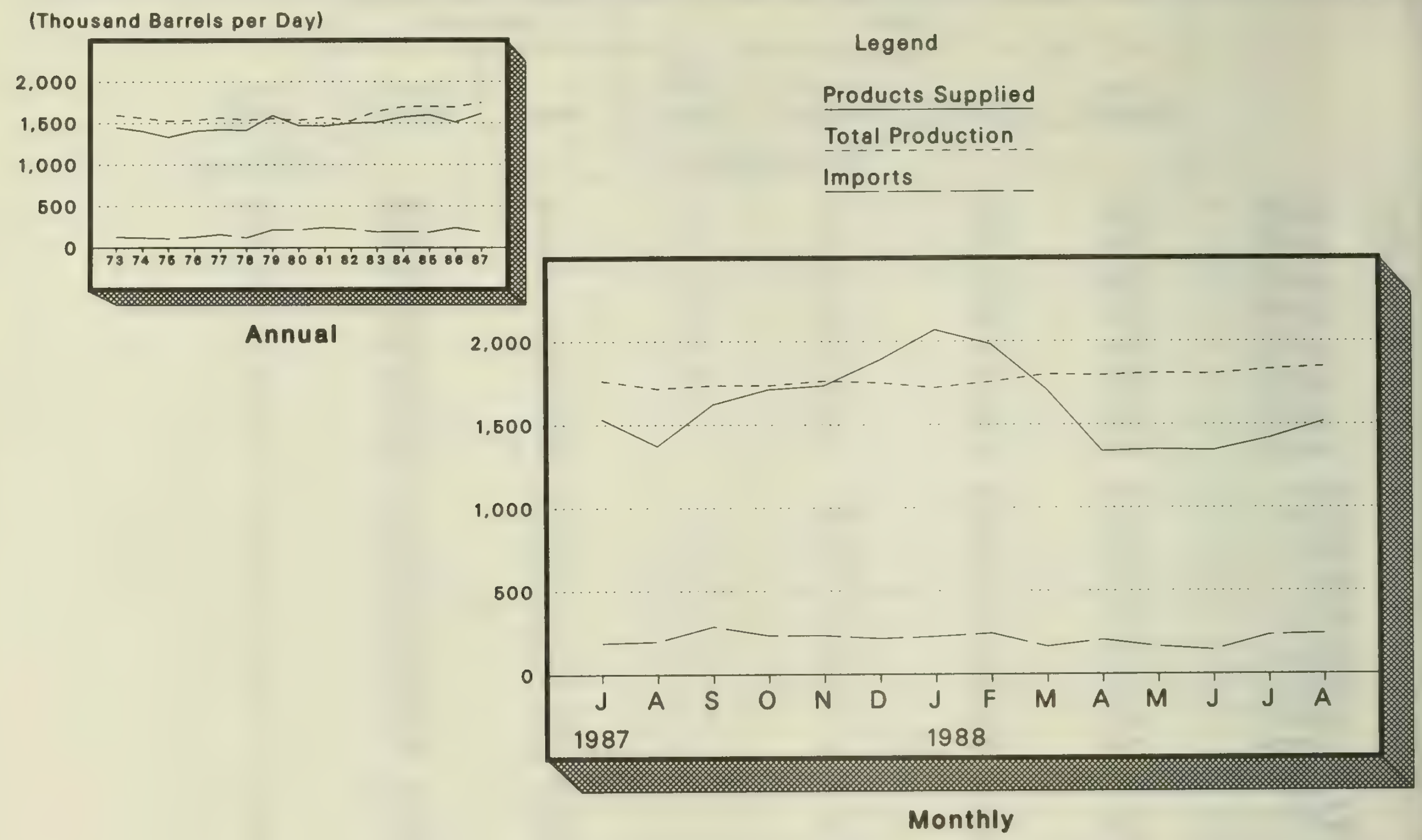
* See Explanatory Note 9.4.

** Italics denote estimates based upon preliminary data. See Explanatory Note 8.

Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: See the last page of this section.

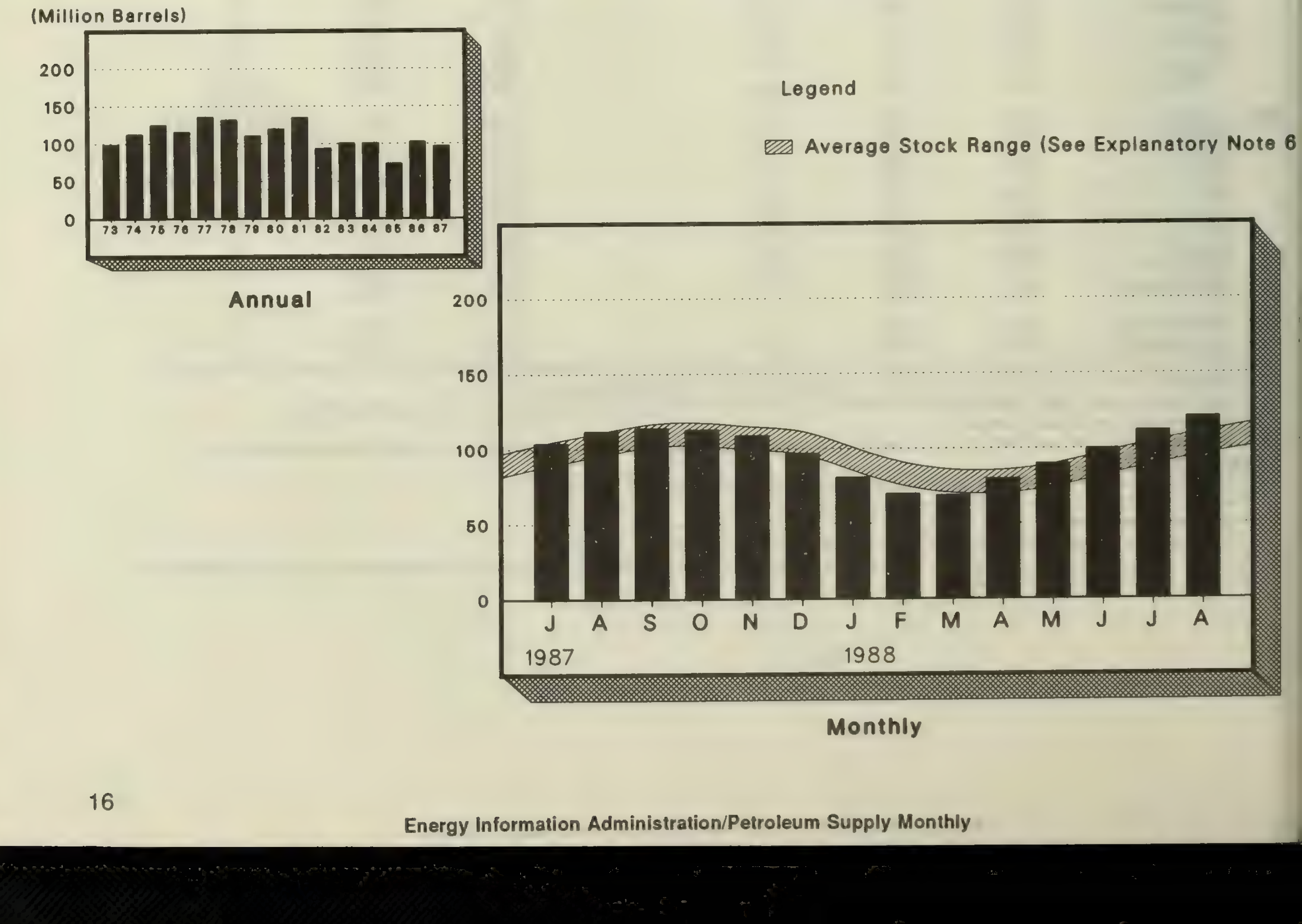
## Figure S11. Liquefied Petroleum Gases Supply and Disposition



Annual

Monthly

## Figure S12. Liquefied Petroleum Gases Ending Stocks



Annual

Monthly

## Table S7. Liquefied Petroleum Gases[1] Supply and Disposition

| | | Supply | | | Disposition | | | |
|---|---|---|---|---|---|---|---|---|
| | | Total Production | Imports | Stock Withdrawal [2] | Refinery Inputs | Exports | Product Supplied | Ending Stocks [3] |
| | | Thousand Barrels per Day | | | | | | Million Barrels |
| 1973 | **Average** | **1,600** | **132** | -35 | 220 | 27 | 1,449 | 99 |
| 1974 | **Average** | **1,565** | **123** | -38 | 220 | 25 | 1,406 | [4] 113 |
| 1975 | **Average** | **1,527** | **112** | [4] -35 | 246 | 26 | 1,333 | 125 |
| 1976 | **Average** | **1,535** | **130** | 24 | 260 | 25 | 1,404 | 116 |
| 1977 | **Average** | **1,566** | **161** | -55 | 233 | 18 | 1,422 | 136 |
| 1978 | **Average** | **1,537** | **123** | 12 | 239 | 20 | 1,413 | 132 |
| 1979 | **Average** | **1,556** | **217** | 70 | 236 | 15 | 1,592 | 111 |
| 1980 | **Average** | **1,535** | **216** | -27 | 233 | 21 | 1,469 | [4] 120 |
| 1981 | **Average** | **1,571** | **244** | [4] -18 | 289 | 42 | 1,466 | 135 |
| 1982 | **Average** | **1,528** | **226** | 111 | 300 | 65 | 1,499 | [4] 94 |
| 1983 | **Average** | **1,642** | **190** | [4] 4 | 253 | 73 | 1,509 | [4] 101 |
| 1984 | **Average** | **1,697** | **195** | [4] 19 | 291 | 48 | 1,572 | 101 |
| 1985 | **Average** | **1,704** | **187** | 75 | 304 | 52 | 1,599 | 74 |
| 1986 | January | 1,850 | 280 | 80 | 364 | 47 | 1,800 | 71 |
| | February | 1,815 | 208 | 108 | 325 | 74 | 1,733 | 68 |
| | March | 1,693 | 202 | -98 | 250 | 47 | 1,500 | 71 |
| | April | 1,642 | 134 | -200 | 256 | 33 | 1,286 | 77 |
| | May | 1,685 | 196 | -336 | 267 | 40 | 1,238 | 87 |
| | June | 1,649 | 253 | -490 | 228 | 25 | 1,158 | 102 |
| | July | 1,684 | 303 | -450 | 199 | 50 | 1,287 | 116 |
| | August | 1,619 | 271 | -332 | 243 | 53 | 1,262 | 126 |
| | September | 1,631 | 282 | -142 | 288 | 27 | 1,456 | 131 |
| | October | 1,625 | 234 | 249 | 332 | 26 | 1,750 | 123 |
| | November | 1,724 | 310 | 254 | 417 | 53 | 1,817 | 115 |
| | December | 1,725 | 227 | 411 | 456 | 33 | 1,875 | 103 |
| | **Average** | **1,695** | **242** | **-80** | **302** | **42** | **1,512** | – |
| 1987 | January | 1,751 | 183 | 500 | 419 | 43 | 1,971 | 87 |
| | February | 1,762 | 201 | 205 | 341 | 38 | 1,789 | 81 |
| | March | 1,761 | 132 | -10 | 282 | 52 | 1,550 | 82 |
| | April | 1,775 | 149 | -121 | 274 | 36 | 1,493 | 85 |
| | May | 1,732 | 142 | -283 | 269 | 34 | 1,288 | 94 |
| | June | 1,732 | 119 | -175 | 255 | 22 | 1,400 | 99 |
| | July | 1,764 | 190 | -145 | 244 | 30 | 1,534 | 104 |
| | August | 1,717 | 198 | -259 | 252 | 33 | 1,372 | 112 |
| | September | 1,736 | 288 | -81 | 266 | 56 | 1,622 | 114 |
| | October | 1,736 | 233 | 59 | 294 | 23 | 1,711 | 113 |
| | November | 1,763 | 233 | 129 | 356 | 35 | 1,735 | 109 |
| | December | 1,753 | 214 | 372 | 395 | 56 | 1,887 | 97 |
| | **Average** | **1,748** | **190** | **15** | **304** | **38** | **1,612** | – |
| 1988 | January | 1,723 | 226 | 529 | 366 | 44 | 2,069 | 81 |
| | February | 1,757 | 245 | 364 | 336 | 47 | 1,982 | 70 |
| | March | 1,802 | 165 | 45 | 266 | 36 | 1,710 | 69 |
| | April | 1,796 | 205 | -362 | 256 | 43 | 1,339 | 80 |
| | May | 1,809 | 165 | -333 | 253 | 37 | 1,350 | 90 |
| | June | 1,804 | 144 | -333 | 234 | 38 | 1,343 | 100 |
| | July | 1,831 | 233 | -384 | 228 | 35 | 1,416 | 112 |
| | August* | 1,848 | 241 | -281 | 241 | 50 | 1,517 | 121 |
| | **8-Mo. Average** | **1,796** | **203** | **-96** | **272** | **41** | **1,590** | – |
| 1987 | **8-Mo. Average** | **1,749** | **164** | **-38** | **292** | **36** | **1,548** | – |
| 1986 | **8-Mo. Average** | **1,704** | **232** | **-218** | **266** | **46** | **1,405** | – |

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[1] Includes ethane, propane, normal butane, and isobutane. Beginning in January 1984, unfractionated stream is reported by individual product.

[2] A negative number indicates an increase in stocks and a positive number indicates a decrease.

[3] Stocks are totals as of end of period.

[4] In January 1975, 1981, 1983, and 1984, a new stock basis was established affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10.

* See Explanatory Note 9.5.

Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: See the last page of this section.

## Table S8. Other Petroleum Products[1] Supply and Disposition

| | | Supply | | | Disposition | | |
|---|---|---|---|---|---|---|---|
| | | Total Production | Imports | Stock Withdrawal[2] | Refinery Inputs | Exports | Product Supplied | Ending Stocks[3] |
| | | Thousand Barrels per Day | | | | | | Million Barrels |
| 1973 | **Average** | **3,693** | **502** | **-9** | **750** | **166** | **3,270** | **208** |
| 1974 | **Average** | **3,558** | **432** | **-28** | **665** | **174** | **3,123** | [4] **218** |
| 1975 | **Average** | **3,418** | **277** | [4] **4** | **537** | **160** | **3,002** | **219** |
| 1976 | **Average** | **3,643** | **206** | **-5** | **524** | **175** | **3,145** | **220** |
| 1977 | **Average** | **3,912** | **205** | **-27** | **514** | **165** | **3,410** | **230** |
| 1978 | **Average** | **4,046** | **166** | **14** | **492** | **167** | **3,568** | **225** |
| 1979 | **Average** | **4,153** | **195** | **-37** | **352** | **209** | **3,749** | **238** |
| 1980 | **Average** | **3,956** | **210** | **-23** | **311** | **198** | **3,634** | [4] **247** |
| 1981 | **Average** | **3,739** | **226** | [4] **46** | **723** | **199** | **3,088** | **282** |
| 1982 | **Average** | **3,453** | **334** | **80** | **787** | **211** | **2,869** | [4] **253** |
| 1983 | **Average** | **3,460** | **411** | [4] **6** | **712** | **242** | **2,923** | [4] **256** |
| 1984 | **Average** | **3,632** | **565** | [4] **23** | **791** | **245** | **3,183** | **240** |
| 1985 | **Average** | **3,721** | **588** | **-17** | **886** | **240** | **3,166** | **246** |
| 1986 | January | 3,902 | 541 | [5] -172 | 967 | 311 | 2,993 | 252 |
| | February | 3,868 | 393 | -209 | 747 | 270 | 3,035 | [5] 258 |
| | March | 3,754 | 454 | [5] 21 | 854 | 208 | 3,167 | 257 |
| | April | 3,788 | 638 | -100 | 760 | 369 | 3,196 | 260 |
| | May | 4,055 | 659 | -114 | 810 | 298 | 3,492 | [5] 264 |
| | June | 4,209 | 687 | [5] -70 | 853 | 263 | 3,710 | 266 |
| | July | 4,145 | 589 | [5] 119 | 1,064 | 357 | 3,432 | 262 |
| | August | 4,223 | 572 | 335 | 1,061 | 301 | 3,768 | [5] 252 |
| | September | 4,225 | 571 | [5] 35 | 846 | 278 | 3,708 | [5] 251 |
| | October | 3,969 | 575 | [5] -112 | 666 | 375 | 3,391 | 254 |
| | November | 3,904 | 559 | [5] 36 | 940 | 342 | 3,217 | 253 |
| | December | 3,920 | 490 | [5] 90 | 1,069 | 325 | 3,105 | 250 |
| | **Average** | **3,997** | **561** | **-10** | **888** | **308** | **3,353** | **–** |
| 1987 | January | 3,852 | 469 | -121 | 659 | 219 | 3,323 | 254 |
| | February | 3,796 | 687 | -389 | 352 | 320 | 3,422 | 265 |
| | March | 3,766 | 663 | -128 | 757 | 281 | 3,262 | 269 |
| | April | 3,933 | 589 | 107 | 872 | 254 | 3,502 | 266 |
| | May | 4,049 | 529 | 178 | 913 | 320 | 3,523 | 260 |
| | June | 4,203 | 712 | 158 | 896 | 320 | 3,857 | 255 |
| | July | 4,363 | 550 | 91 | 835 | 256 | 3,913 | 253 |
| | August | 4,340 | 616 | -148 | 693 | 238 | 3,876 | 257 |
| | September | 4,350 | 611 | -24 | 903 | 353 | 3,681 | 258 |
| | October | 4,223 | 686 | 14 | 971 | 272 | 3,680 | 258 |
| | November | 4,010 | 583 | -20 | 975 | 305 | 3,294 | 258 |
| | December | 4,050 | 633 | 261 | 1,091 | 330 | 3,523 | 250 |
| | **Average** | **4,080** | **610** | **1** | **829** | **289** | **3,572** | **–** |
| 1988 | January | 3,988 | 639 | -143 | 785 | 354 | 3,345 | 254 |
| | February | 3,941 | 570 | -35 | 726 | 318 | 3,433 | 255 |
| | March | 4,175 | 603 | -269 | 656 | 328 | 3,525 | 264 |
| | April | 4,052 | 697 | -97 | 832 | 288 | 3,533 | 267 |
| | May | 4,097 | 752 | -341 | 471 | 274 | 3,763 | 277 |
| | June | 4,278 | 703 | 76 | 759 | 379 | 3,920 | 275 |
| | July | 4,333 | 652 | -20 | 824 | 329 | 3,812 | 276 |
| | August* | 4,440 | 644 | 201 | 782 | 302 | 4,200 | 269 |
| | **8-Mo. Average** | **4,165** | **658** | **-79** | **729** | **321** | **3,693** | **–** |
| 1987 | **8-Mo. Average** | **4,041** | **600** | **-29** | **751** | **275** | **3,586** | **–** |
| 1986 | **8-Mo. Average** | **3,995** | **568** | **-21** | **892** | **297** | **3,352** | **–** |

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[1] Includes pentanes plus, other hydrocarbons and alcohol, unfinished oils, gasoline blending components and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil, and liquefied petroleum gases.

[2] A negative number indicates an increase in stocks and a positive number indicates a decrease.

[3] Stocks are totals as of end of period.

[4] In January 1975, 1981, 1983, and 1984, a new stock basis was established affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10.

[5] Ending stocks and stock withdrawal for 1986 are slightly different from those published in the 1986 *Petroleum Supply Annual* (PSA)-- Volume 1. PSA statistics inadvertently omitted stocks of other hydrocarbons and alcohol.

* See Explanatory Note 9.6.

Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: See the last page of this section.

# Sources of Summary Statistics

1. 1973 through 1976: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys, Petroleum Statement, Annual* and *PAD Districts Supply/Demand, Annual.*

2. 1977 through 1980: U.S. Department of Energy, Energy Information Administration (EIA), *Energy Data Reports, Petroleum Statement, Annual* and *PAD Districts Supply/Demand, Annual*, and unleaded gasoline data from *Monthly Petroleum Statistics Report.*

3. 1981 through 1987: EIA, *Petroleum Supply Annual.*

4. January 1988 through August 1988: Detailed Statistics in appropriate issues of the *Petroleum Supply Monthly.* (See Explanatory Notes 9.1 through 9.6.)

5. September 1988: Estimates based on EIA weekly data (except domestic crude oil production). (See Explanatory Note 1.1.)

6. January 1988 through September 1988: Domestic crude oil production estimate based on historical statistics from State conservation agencies and the U.S. Geological Survey. (See Explanatory Note 3.)

# Detailed Statistics

## Table 1. U.S. Petroleum Balance, August 1988

| | Current Month | | Year to Date | |
|---|---|---|---|---|
| | Thousand Barrels | Thousand Barrels per Day | Thousand Barrels | Thousand Barrels per Day |
| Crude Oil (Including Lease Condensate) | | | | |
| Field Production | | | | |
| (1) Alaska | E 62,270 | E 2,009 | E 492,584 | E 2,019 |
| (2) Lower 48 States | E 187,696 | E 6,055 | E 1,511,497 | E 6,195 |
| (3) Total U.S. | E 249,966 | E 8,063 | E 2,004,081 | E 8,213 |
| Net Imports | | | | |
| (4) Imports (Gross Excluding SPR) | 155,398 | 5,013 | 1,195,411 | 4,899 |
| (5) SPR Imports | 796 | 26 | 11,401 | 47 |
| (6) Exports | 4,818 | 155 | 40,488 | 166 |
| (7) Imports (Net Including SPR) | 151,376 | 4,883 | 1,166,324 | 4,780 |
| Other Sources | | | | |
| (8) SPR Withdrawal (+) or Addition (-) | -801 | -26 | -11,497 | -47 |
| (9) Other Stock Withdrawal (+) or Addition (-) | 16,160 | 521 | 16,119 | 66 |
| (10) Product Supplied and Losses | -919 | -30 | -9,345 | -38 |
| (11) Unaccounted for [1] | 11,929 | 385 | 80,280 | 329 |
| (12) Total Other Sources | 26,369 | 851 | 75,557 | 310 |
| (13) Crude Input to Refineries | 427,711 | 13,797 | 3,245,962 | 13,303 |
| (13) = (3) + (7) + (12) | | | | |
| Natural Gas Plant Liquids (NGPL) | | | | |
| (14) Field Production | 50,329 | 1,624 | 392,337 | 1,608 |
| (15) Net Imports [2] | 529 | 17 | 2,248 | 9 |
| (16) Stock Withdrawal (+) or Addition (-) [2] | -109 | -4 | -2,839 | -12 |
| (17) Total NGPL Supply | 50,749 | 1,637 | 391,746 | 1,606 |
| Other Liquids | | | | |
| Unfinished Oils and Gasoline Blending Components, Total | | | | |
| (18) Stock Withdrawal (+) or Addition (-) | 2,252 | 73 | -16,564 | -68 |
| (19) Imports | 11,824 | 381 | 102,040 | 418 |
| (20) Other Hydrocarbons and Alcohol New Supply (Field Production) | 2,142 | 69 | 14,322 | 59 |
| (21) Refinery Processing Gain [1] | 21,260 | 686 | 163,009 | 668 |
| (22) Crude Oil Product Supplied | 917 | 30 | 9,305 | 38 |
| (23) Total Other Liquids | 38,395 | 1,239 | 272,112 | 1,115 |
| (23) = (18) through (22) | | | | |
| (24) Total Production of Products [3] | 516,855 | 16,673 | 3,909,820 | 16,024 |
| (24) = (13) + (17) + (23) | | | | |
| Net Imports of Refined Products [3] | | | | |
| (25) Imports (Gross) | 53,773 | 1,735 | 394,678 | 1,618 |
| (26) Exports | 20,437 | 659 | 162,774 | 667 |
| (27) Imports (Net) | 33,336 | 1,075 | 231,904 | 950 |
| (28) Total New Supply of Products | 550,191 | 17,748 | 4,141,724 | 16,974 |
| (28) = (24) + (27) | | | | |
| (29) Refined Products Stock Withdrawal (+) or Addition (-) [3] | -11,554 | -373 | 1,895 | 8 |
| (30) Total Petroleum Products Supplied for Domestic Use | 538,637 | 17,375 | 4,143,619 | 16,982 |
| (30) = (28) + (29) | | | | |
| (31) Finished Motor Gasoline | 232,843 | 7,511 | 1,781,914 | 7,303 |
| (32) Distillate Fuel Oil | 88,647 | 2,860 | 747,558 | 3,064 |
| (33) Residual Fuel Oil | 38,993 | 1,258 | 315,815 | 1,294 |
| (34) Liquefied Petroleum Gases | 47,027 | 1,517 | 387,890 | 1,590 |
| (35) Other [4] | 130,210 | 4,200 | 901,137 | 3,693 |
| (36) Crude Oil | 917 | 30 | 9,305 | 38 |
| (37) Total Product Supplied | 538,637 | 17,375 | 4,143,619 | 16,982 |
| (37) = (31) through (36) | | | | |
| Ending Stocks, All Oils | | | | |
| (38) Crude Oil and Lease Condensate (Excluding SPR) | 333,170 | -- | 333,170 | -- |
| (39) Strategic Petroleum Reserve (SPR) | 552,145 | -- | 552,145 | -- |
| (40) Unfinished Oils | 111,078 | -- | 111,078 | -- |
| (41) Gasoline Blending Components [5] | 36,755 | -- | 36,755 | -- |
| (42) Pentanes Plus | 9,870 | -- | 9,870 | -- |
| (43) Finished Refined Products [3] | 577,719 | -- | 577,719 | -- |
| (44) Total Stocks | 1,620,737 | -- | 1,620,737 | -- |

[1] A balancing item.

[2] Includes products in the pentanes plus category only.

[3] For products included see Explanatory Note 9.7.

[4] Includes pentanes plus, other liquids, and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil and liquefied petroleum gases.

[5] Includes other hydrocarbons and alcohol.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1, 2 and 9.7.

## Table 2. Supply and Disposition of Crude Oil and Petroleum Products, August 1988
(Thousand Barrels)

| Commodity | Supply | | | | | Disposition | | | | Ending Stocks |
|---|---|---|---|---|---|---|---|---|---|---|
| | Field Production | Refinery Production | Imports | Stock Withdrawal (+) or Addition (-) | Unaccounted For Crude Oil[1] | Crude Losses | Refinery Inputs | Exports | Products Supplied | |
| **Crude Oil (including lease condensate)** | **E 249,966** | **0** | **156,194** | **15,359** | **11,929** | **2** | **427,711** | **4,818** | **917** | **885,315** |
| **Natural Gas Liquids and LRGs** | **50,227** | **16,909** | **8,079** | **-8,814** | **0** | **0** | **13,121** | **1,613** | **51,668** | **130,481** |
| Pentanes Plus | 9,863 | 0 | 596 | -109 | 0 | 0 | 5,642 | 67 | 4,641 | 9,870 |
| Liquefied Petroleum Gases | 40,364 | 16,909 | 7,483 | -8,705 | 0 | 0 | 7,479 | 1,546 | 47,027 | 120,611 |
| Ethane | 15,343 | 432 | 83 | 447 | 0 | 0 | 58 | 136 | 16,111 | 18,242 |
| Propane | 15,227 | 11,655 | 3,720 | -4,890 | 0 | 0 | 263 | 850 | 24,599 | 62,794 |
| Normal Butane | 5,228 | 4,416 | 2,377 | -3,785 | 0 | 0 | 2,396 | 493 | 5,347 | 28,637 |
| Isobutane | 4,566 | 406 | 1,303 | -477 | 0 | 0 | 4,762 | 67 | 969 | 10,938 |
| **Other Liquids** | **2,142** | **0** | **11,824** | **2,252** | **0** | **0** | **18,602** | **0** | **-2,384** | **147,833** |
| Other Hydrocarbons and Alcohol | 2,142 | 0 | 0 | -50 | 0 | 0 | 2,092 | 0 | 0 | 394 |
| Unfinished Oils | 0 | 0 | 9,813 | 2,522 | 0 | 0 | 14,512 | 0 | -2,177 | 111,078 |
| Motor Gasoline Blending Components | 0 | 0 | 2,011 | -439 | 0 | 0 | 1,779 | 0 | -207 | 36,248 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | 219 | 0 | 0 | 219 | 0 | 0 | 113 |
| **Finished Petroleum Products** | **102** | **463,785** | **46,290** | **-2,849** | **0** | **0** | **0** | **18,892** | **488,436** | **457,108** |
| Finished Motor Gasoline | 10 | 223,301 | 14,417 | -4,406 | 0 | 0 | 0 | 479 | 232,843 | 182,354 |
| Finished Leaded Motor Gasoline | 9 | 40,909 | 212 | -56 | 0 | 0 | 0 | 151 | 40,923 | 44,510 |
| Finished Unleaded Motor Gasoline | 1 | 182,392 | 14,205 | -4,350 | 0 | 0 | 0 | 328 | 191,920 | 137,844 |
| Finished Aviation Gasoline | 0 | 1,000 | 4 | -123 | 0 | 0 | 0 | 0 | 881 | 1,906 |
| Naphtha-Type Jet Fuel | 0 | 6,388 | 105 | -151 | 0 | 0 | 0 | 20 | 6,322 | 6,861 |
| Kerosene-Type Jet Fuel | 0 | 35,286 | 3,087 | 326 | 0 | 0 | 0 | 440 | 38,259 | 39,971 |
| Kerosene | 0 | 2,498 | 235 | -931 | 0 | 0 | 0 | 10 | 1,792 | 7,131 |
| Distillate Fuel Oil | 41 | 88,138 | 8,377 | -5,751 | 0 | 0 | 0 | 2,158 | 88,647 | 125,185 |
| Residual Fuel Oil | 0 | 26,761 | 15,964 | 3,232 | 0 | 0 | 0 | 6,964 | 38,993 | 37,840 |
| Naphtha < 400 Deg. for Petro. Feed. Use | 0 | 3,480 | 2,144 | 182 | 0 | 0 | 0 | 198 | 5,608 | 2,109 |
| Other Oils > 400 Deg. for Petro. Feed. Use | 0 | 7,681 | 228 | -233 | 0 | 0 | 0 | 608 | 7,068 | 2,483 |
| Special Naphthas | 0 | 2,215 | 305 | 9 | 0 | 0 | 0 | 285 | 2,244 | 3,631 |
| Lubricants | 0 | 5,280 | 64 | 385 | 0 | 0 | 0 | 772 | 4,957 | 13,638 |
| Waxes | 0 | 480 | 39 | 34 | 0 | 0 | 0 | 63 | 490 | 868 |
| Petroleum Coke | 0 | 16,717 | 52 | 911 | 0 | 0 | 0 | 6,775 | 10,905 | 7,559 |
| Asphalt and Road Oil | 0 | 20,114 | 1,255 | 3,697 | 0 | 0 | 0 | 76 | 24,990 | 21,893 |
| Still Gas | 0 | 22,110 | 0 | 0 | 0 | 0 | 0 | 0 | 22,110 | 0 |
| Miscellaneous Products | 51 | 2,336 | 14 | -30 | 0 | 0 | 0 | 43 | 2,328 | 3,679 |
| **Total** | **302,437** | **480,694** | **222,387** | **5,948** | **11,929** | **2** | **459,434** | **25,322** | **538,637** | **1,620,737** |

[1] Unaccounted for crude oil is a balancing item.

(s) = Less than 500 barrels.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 3. Year-to-Date Supply and Disposition of Crude Oil and Petroleum Products, January - August
(Thousand Barrels)

| Commodity | Supply | | | | | Disposition | | | | Ending Stocks |
|---|---|---|---|---|---|---|---|---|---|---|
| | Field Production | Refinery Production | Imports | Stock Withdrawal (+) or Addition (-) | Unaccounted For Crude Oil[1] | Crude Losses | Refinery Inputs | Exports | Products Supplied | |
| **Crude Oil (including lease condensate)** | E **2,004,081** | **0** | **1,206,812** | **4,622** | **80,280** | **40** | **3,245,962** | **40,488** | **9,305** | **885,315** |
| **Natural Gas Liquids and LRGs** | **391,402** | **120,887** | **52,226** | **-26,298** | **0** | **0** | **105,465** | **10,556** | **422,196** | **130,481** |
| Pentanes Plus | 73,958 | 0 | 2,746 | -2,839 | 0 | 0 | 39,061 | 498 | 34,306 | 9,870 |
| Liquefied Petroleum Gases | 317,444 | 120,887 | 49,480 | -23,459 | 0 | 0 | 66,404 | 10,058 | 387,890 | 120,611 |
| Ethane | 118,019 | 2,378 | 327 | 4,017 | 0 | 0 | 488 | 1,005 | 123,248 | 18,242 |
| Propane | 123,263 | 85,099 | 25,644 | -14,945 | 0 | 0 | 1,973 | 5,878 | 211,210 | 62,794 |
| Normal Butane | 40,827 | 29,971 | 14,835 | -12,089 | 0 | 0 | 29,607 | 2,677 | 41,260 | 28,637 |
| Isobutane | 35,335 | 3,439 | 8,674 | -442 | 0 | 0 | 34,336 | 498 | 12,173 | 10,938 |
| **Other Liquids** | **14,322** | **0** | **102,040** | **-16,564** | **0** | **0** | **138,773** | **0** | **-38,975** | **147,833** |
| Other Hydrocarbons and Alcohol | 14,322 | 0 | 0 | 38 | 0 | 0 | 14,360 | 0 | 0 | 394 |
| Unfinished Oils | 0 | 0 | 87,677 | -17,893 | 0 | 0 | 101,042 | 0 | -31,258 | 111,078 |
| Motor Gasoline Blending Components | 0 | 0 | 14,363 | 1,148 | 0 | 0 | 23,029 | 0 | -7,518 | 36,248 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | 143 | 0 | 0 | 342 | 0 | -199 | 113 |
| **Finished Petroleum Products** | **935** | **3,532,322** | **345,197** | **25,354** | **0** | **0** | **0** | **152,716** | **3,751,093** | **457,108** |
| Finished Motor Gasoline | 78 | 1,685,394 | 95,251 | 6,540 | 0 | 0 | 0 | 5,349 | 1,781,914 | 182,354 |
| Finished Leaded Motor Gasoline | 70 | 330,431 | 3,342 | 8,685 | 0 | 0 | 0 | 1,648 | 340,880 | 44,510 |
| Finished Unleaded Motor Gasoline | 8 | 1,354,963 | 91,909 | -2,145 | 0 | 0 | 0 | 3,701 | 1,441,034 | 137,844 |
| Finished Aviation Gasoline | 0 | 6,196 | 117 | 425 | 0 | 0 | 0 | 0 | 6,738 | 1,906 |
| Naphtha-Type Jet Fuel | 0 | 49,629 | 725 | 1,095 | 0 | 0 | 0 | 122 | 51,327 | 6,861 |
| Kerosene-Type Jet Fuel | 0 | 282,177 | 20,515 | 2,000 | 0 | 0 | 0 | 6,644 | 298,048 | 39,971 |
| Kerosene | 0 | 17,862 | 2,818 | 1,316 | 0 | 0 | 0 | 211 | 21,785 | 7,131 |
| Distillate Fuel Oil | 357 | 693,181 | 62,453 | 9,297 | 0 | 0 | 0 | 17,730 | 747,558 | 125,185 |
| Residual Fuel Oil | 0 | 226,320 | 131,729 | 9,497 | 0 | 0 | 0 | 51,731 | 315,815 | 37,840 |
| Naphtha < 400 Deg. for Petro. Feed. Use | 0 | 30,010 | 16,223 | 227 | 0 | 0 | 0 | 1,186 | 45,274 | 2,109 |
| Other Oils > 400 Deg. for Petro. Feed. Use | 0 | 55,450 | 987 | -882 | 0 | 0 | 0 | 4,190 | 51,365 | 2,483 |
| Special Naphthas | 0 | 14,213 | 3,306 | 22 | 0 | 0 | 0 | 1,461 | 16,080 | 3,631 |
| Lubricants | 0 | 43,006 | 2,418 | -321 | 0 | 0 | 0 | 6,115 | 38,988 | 13,638 |
| Waxes | 0 | 4,201 | 394 | -85 | 0 | 0 | 0 | 403 | 4,107 | 868 |
| Petroleum Coke | 0 | 132,507 | 319 | -799 | 0 | 0 | 0 | 56,934 | 75,093 | 7,559 |
| Asphalt and Road Oil | 0 | 108,929 | 7,552 | -3,094 | 0 | 0 | 0 | 206 | 113,181 | 21,893 |
| Still Gas | 0 | 165,972 | 0 | 0 | 0 | 0 | 0 | 0 | 165,972 | 0 |
| Miscellaneous Products | 500 | 17,275 | 390 | 116 | 0 | 0 | 0 | 432 | 17,849 | 3,679 |
| **Total** | **2,410,740** | **3,653,209** | **1,706,276** | **-12,886** | **80,280** | **40** | **3,490,200** | **203,760** | **4,143,619** | **1,620,737** |

[1] Unaccounted for crude oil is a balancing item.

(s) = Less than 500 barrels.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 4. Daily Average Supply and Disposition of Crude Oil and Petroleum Products, August 1988
(Thousand Barrels per Day)

| Commodity | Supply | | | | | Disposition | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Field Production | Refinery Production | Imports | Stock Withdrawal (+) or Addition (-) | Unaccounted For Crude Oil[1] | Crude Losses | Refinery Inputs | Exports | Products Supplied |
| **Crude Oil (including lease condensate)** | E 8,063 | 0 | 5,039 | 495 | 385 | (s) | 13,797 | 155 | 30 |
| **Natural Gas Liquids and LRGs** | **1,620** | **545** | **261** | **-284** | **0** | **0** | **423** | **52** | **1,667** |
| Pentanes Plus | 318 | 0 | 19 | -4 | 0 | 0 | 182 | 2 | 150 |
| Liquefied Petroleum Gases | 1,302 | 545 | 241 | -281 | 0 | 0 | 241 | 50 | 1,517 |
| Ethane | 495 | 14 | 3 | 14 | 0 | 0 | 2 | 4 | 520 |
| Propane | 491 | 376 | 120 | -158 | 0 | 0 | 8 | 27 | 794 |
| Normal Butane | 169 | 142 | 77 | -122 | 0 | 0 | 77 | 16 | 172 |
| Isobutane | 147 | 13 | 42 | -15 | 0 | 0 | 154 | 2 | 31 |
| **Other Liquids** | **69** | **0** | **381** | **73** | **0** | **0** | **600** | **0** | **-77** |
| Other Hydrocarbons and Alcohol | 69 | 0 | 0 | -2 | 0 | 0 | 67 | 0 | 0 |
| Unfinished Oils | 0 | 0 | 317 | 81 | 0 | 0 | 468 | 0 | -70 |
| Motor Gasoline Blending Components | 0 | 0 | 65 | -14 | 0 | 0 | 57 | 0 | -7 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | 7 | 0 | 0 | 7 | 0 | 0 |
| **Finished Petroleum Products** | **3** | **14,961** | **1,493** | **-92** | **0** | **0** | **0** | **609** | **15,756** |
| Finished Motor Gasoline | (s) | 7,203 | 465 | -142 | 0 | 0 | 0 | 15 | 7,511 |
| Finished Leaded Motor Gasoline | (s) | 1,320 | 7 | -2 | 0 | 0 | 0 | 5 | 1,320 |
| Finished Unleaded Motor Gasoline | (s) | 5,884 | 458 | -140 | 0 | 0 | 0 | 11 | 6,191 |
| Finished Aviation Gasoline | 0 | 32 | (s) | -4 | 0 | 0 | 0 | 0 | 28 |
| Naphtha-Type Jet Fuel | 0 | 206 | 3 | -5 | 0 | 0 | 0 | 1 | 204 |
| Kerosene-Type Jet Fuel | 0 | 1,138 | 100 | 11 | 0 | 0 | 0 | 14 | 1,234 |
| Kerosene | 0 | 81 | 8 | -30 | 0 | 0 | 0 | (s) | 58 |
| Distillate Fuel Oil | 1 | 2,843 | 270 | -186 | 0 | 0 | 0 | 70 | 2,860 |
| Residual Fuel Oil | 0 | 863 | 515 | 104 | 0 | 0 | 0 | 225 | 1,258 |
| Naphtha < 400 Deg. for Petro. Feed. Use | 0 | 112 | 69 | 6 | 0 | 0 | 0 | 6 | 181 |
| Other Oils > 400 Deg. for Petro. Feed. Use | 0 | 248 | 7 | -8 | 0 | 0 | 0 | 20 | 228 |
| Special Naphthas | 0 | 71 | 10 | (s) | 0 | 0 | 0 | 9 | 72 |
| Lubricants | 0 | 170 | 2 | 12 | 0 | 0 | 0 | 25 | 160 |
| Waxes | 0 | 15 | 1 | 1 | 0 | 0 | 0 | 2 | 16 |
| Petroleum Coke | 0 | 539 | 2 | 29 | 0 | 0 | 0 | 219 | 352 |
| Asphalt and Road Oil | 0 | 649 | 40 | 119 | 0 | 0 | 0 | 2 | 806 |
| Still Gas | 0 | 713 | 0 | 0 | 0 | 0 | 0 | 0 | 713 |
| Miscellaneous Products | 2 | 75 | (s) | -1 | 0 | 0 | 0 | 1 | 75 |
| **Total** | **9,756** | **15,506** | **7,174** | **192** | **385** | **(s)** | **14,820** | **817** | **17,375** |

[1] Unaccounted for crude oil is a balancing item.

(s) = Less than 500 barrels per day.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 5. Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products, January - August 1988
(Thousand Barrels per Day)

| Commodity | Supply | | | | | Disposition | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Field Production | Refinery Production | Imports | Stock Withdrawal (+) or Addition (-) | Unaccounted For Crude Oil[1] | Crude Losses | Refinery Inputs | Exports | Products Supplied |
| **Crude Oil (including lease condensate)** | E **8,213** | **0** | **4,946** | **19** | **329** | (s) | **13,303** | **166** | **38** |
| **Natural Gas Liquids and LRGs** | **1,604** | **495** | **214** | **-108** | **0** | **0** | **432** | **43** | **1,730** |
| Pentanes Plus | 303 | 0 | 11 | -12 | 0 | 0 | 160 | 2 | 141 |
| Liquefied Petroleum Gases | 1,301 | 495 | 203 | -96 | 0 | 0 | 272 | 41 | 1,590 |
| Ethane | 484 | 10 | 1 | 16 | 0 | 0 | 2 | 4 | 505 |
| Propane | 505 | 349 | 105 | -61 | 0 | 0 | 8 | 24 | 866 |
| Normal Butane | 167 | 123 | 61 | -50 | 0 | 0 | 121 | 11 | 169 |
| Isobutane | 145 | 14 | 36 | -2 | 0 | 0 | 141 | 2 | 50 |
| **Other Liquids** | **59** | **0** | **418** | **-68** | **0** | **0** | **569** | **0** | **-160** |
| Other Hydrocarbons and Alcohol | 59 | 0 | 0 | (s) | 0 | 0 | 59 | 0 | 0 |
| Unfinished Oils | 0 | 0 | 359 | -73 | 0 | 0 | 414 | 0 | -128 |
| Motor Gasoline Blending Components | 0 | 0 | 59 | 5 | 0 | 0 | 94 | 0 | -31 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | -1 |
| **Finished Petroleum Products** | **4** | **14,477** | **1,415** | **104** | **0** | **0** | **0** | **626** | **15,373** |
| Finished Motor Gasoline | (s) | 6,907 | 390 | 27 | 0 | 0 | 0 | 22 | 7,303 |
| Finished Leaded Motor Gasoline | (s) | 1,354 | 14 | 36 | 0 | 0 | 0 | 7 | 1,397 |
| Finished Unleaded Motor Gasoline | (s) | 5,553 | 377 | -9 | 0 | 0 | 0 | 15 | 5,906 |
| Finished Aviation Gasoline | 0 | 25 | (s) | 2 | 0 | 0 | 0 | 0 | 28 |
| Naphtha-Type Jet Fuel | 0 | 203 | 3 | 4 | 0 | 0 | 0 | (s) | 210 |
| Kerosene-Type Jet Fuel | 0 | 1,156 | 84 | 8 | 0 | 0 | 0 | 27 | 1,222 |
| Kerosene | 0 | 73 | 12 | 5 | 0 | 0 | 0 | 1 | 89 |
| Distillate Fuel Oil | 1 | 2,841 | 256 | 38 | 0 | 0 | 0 | 73 | 3,064 |
| Residual Fuel Oil | 0 | 928 | 540 | 39 | 0 | 0 | 0 | 212 | 1,294 |
| Naphtha < 400 Deg. for Petro. Feed. Use | 0 | 123 | 66 | 1 | 0 | 0 | 0 | 5 | 186 |
| Other Oils > 400 Deg. for Petro. Feed Use | 0 | 227 | 4 | -4 | 0 | 0 | 0 | 17 | 211 |
| Special Naphthas | 0 | 58 | 14 | (s) | 0 | 0 | 0 | 6 | 66 |
| Lubricants | 0 | 176 | 10 | -1 | 0 | 0 | 0 | 25 | 160 |
| Waxes | 0 | 17 | 2 | (s) | 0 | 0 | 0 | 2 | 17 |
| Petroleum Coke | 0 | 543 | 1 | -3 | 0 | 0 | 0 | 233 | 308 |
| Asphalt and Road Oil | 0 | 446 | 31 | 13 | 0 | 0 | 0 | 1 | 464 |
| Still Gas | 0 | 680 | 0 | 0 | 0 | 0 | 0 | 0 | 680 |
| Miscellaneous Products | 2 | 71 | 2 | (s) | 0 | 0 | 0 | 2 | 73 |
| **Total** | 9,880 | 14,972 | 6,993 | -53 | 329 | (s) | 14,304 | 835 | 16,982 |

[1] Unaccounted for crude oil is a balancing item.

(s) = Less than 500 barrels per day.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 6. PAD District I--Supply and Disposition of Crude Oil and Petroleum Products, August 1988
(Thousand Barrels)

| Commodity | Supply | | | | | | Disposition | | | | Ending Stocks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Field Production | Refinery Production | Imports by PADD of Entry | Stock Withdrawal (+) or Addition (-) | Unaccounted For Crude Oil[1] | Net Receipts | Crude Losses | Refinery Inputs | Exports | Products Supplied | |
| **Crude Oil (including lease condensate)** | E **1,200** | **0** | **38,374** | **-1,008** | **3,217** | **1,803** | **0** | **43,586** | **0** | **0** | **16,144** |
| **Natural Gas Liquids and LRGs** | **913** | **1,797** | **1,200** | **-860** | **0** | **2,564** | **0** | **130** | **247** | **5,237** | **5,709** |
| Liquefied Petroleum Gases | 777 | 1,797 | 693 | -854 | 0 | 2,564 | 0 | 95 | 247 | 4,635 | 5,655 |
| Pentanes Plus | 136 | 0 | 507 | -6 | 0 | 0 | 0 | 35 | 0 | 602 | 54 |
| **Other Liquids** | **41** | **0** | **5,078** | **1,057** | **0** | **184** | **0** | **6,703** | **0** | **-343** | **17,691** |
| Other Hydrocarbons and Alcohol | 41 | 0 | 0 | 3 | 0 | 0 | 0 | 44 | 0 | 0 | 8 |
| Unfinished Oils | 0 | 0 | 3,323 | 448 | 0 | 150 | 0 | 4,985 | 0 | -1,064 | 13,195 |
| Motor Gasoline Blending Components | 0 | 0 | 1,755 | 606 | 0 | 34 | 0 | 1,674 | 0 | 721 | 4,488 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Finished Petroleum Products** | **0** | **50,981** | **38,577** | **-4,558** | **0** | **72,122** | **0** | **0** | **405** | **156,717** | **148,795** |
| Finished Motor Gasoline | 0 | 23,042 | 12,963 | 228 | 0 | 40,795 | 0 | 0 | 10 | 77,018 | 56,469 |
| Finished Leaded Motor Gasoline | 0 | 2,024 | 136 | 376 | 0 | 5,454 | 0 | 0 | 3 | 7,987 | 11,514 |
| Finished Unleaded Motor Gasoline | 0 | 21,018 | 12,827 | -148 | 0 | 35,341 | 0 | 0 | 6 | 69,032 | 44,955 |
| Finished Aviation Gasoline | 0 | 23 | 0 | -65 | 0 | 243 | 0 | 0 | 0 | 201 | 347 |
| Naphtha-Type Jet Fuel | 0 | 898 | 0 | 117 | 0 | 268 | 0 | 0 | 0 | 1,283 | 1,368 |
| Kerosene-Type Jet Fuel | 0 | 2,307 | 1,460 | 919 | 0 | 9,640 | 0 | 0 | 15 | 14,311 | 9,514 |
| Kerosene | 0 | 249 | 235 | -578 | 0 | 382 | 0 | 0 | 8 | 280 | 2,918 |
| Distillate Fuel Oil | 0 | 10,846 | 8,058 | -7,523 | 0 | 18,653 | 0 | 0 | 19 | 30,015 | 52,081 |
| Residual Fuel Oil | 0 | 3,837 | 14,346 | 1,610 | 0 | 288 | 0 | 0 | 2 | 20,079 | 14,929 |
| Petrochemical Feedstocks[2] | 0 | 231 | 415 | 98 | 0 | -32 | 0 | 0 | 89 | 623 | 474 |
| Special Naphthas | 0 | 234 | 82 | -119 | 0 | 262 | 0 | 0 | 13 | 446 | 1,175 |
| Lubricants | 0 | 702 | 41 | 35 | 0 | 1,040 | 0 | 0 | 138 | 1,680 | 2,915 |
| Waxes | 0 | 90 | 21 | 14 | 0 | 0 | 0 | 0 | 10 | 115 | 74 |
| Petroleum Coke | 0 | 1,358 | 0 | -109 | 0 | 0 | 0 | 0 | 74 | 1,175 | 641 |
| Asphalt and Road Oil | 0 | 4,528 | 956 | 672 | 0 | 515 | 0 | 0 | 1 | 6,670 | 5,106 |
| Still Gas | 0 | 2,188 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,188 | 0 |
| Miscellaneous Products | 0 | 448 | 0 | 143 | 0 | 68 | 0 | 0 | 27 | 632 | 784 |
| **Total** | **2,154** | **52,778** | **83,229** | **-5,369** | **3,217** | **76,673** | **0** | **50,419** | **651** | **161,611** | **188,339** |

[1] Unaccounted for crude oil is a balancing item.

[2] Includes naphtha less than 400 degrees F endpoint and other oils equal to or greater than 400 degrees F endpoint.

(s) = Less than 500 barrels.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 7. PAD District II—Supply and Disposition of Crude Oil and Petroleum Products, August 1988
(Thousand Barrels)

| Commodity | Supply | | | | | | Disposition | | | | Ending Stocks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Field Production | Refinery Production | Imports by PADD of Entry | Stock Withdrawal (+) or Addition (-) | Unaccounted For Crude Oil[1] | Net Receipts | Crude Losses | Refinery Inputs | Exports | Products Supplied | |
| **Crude Oil (including lease condensate)** | E **25,522** | **0** | **16,738** | **9,862** | **-2,017** | **46,215** | **0** | **96,170** | **150** | **0** | **68,623** |
| **Natural Gas Liquids and LRGs** | **9,397** | **2,889** | **2,547** | **-2,770** | **0** | **651** | **0** | **3,257** | **576** | **8,880** | **39,246** |
| Liquefied Petroleum Gases | 7,865 | 2,889 | 2,512 | -2,823 | 0 | 169 | 0 | 2,076 | 509 | 8,026 | 35,824 |
| Pentanes Plus | 1,532 | 0 | 35 | 53 | 0 | 482 | 0 | 1,181 | 67 | 854 | 3,422 |
| **Other Liquids** | **625** | **0** | **0** | **-274** | **0** | **-72** | **0** | **1,865** | **0** | **-1,586** | **23,823** |
| Other Hydrocarbons and Alcohol | 625 | 0 | 0 | -19 | 0 | 0 | 0 | 606 | 0 | 0 | 189 |
| Unfinished Oils | 0 | 0 | 0 | 892 | 0 | 4 | 0 | 1,189 | 0 | -293 | 15,454 |
| Motor Gasoline Blending Components | 0 | 0 | 0 | -1,352 | 0 | -76 | 0 | -135 | 0 | -1,293 | 8,150 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | 205 | 0 | 0 | 0 | 205 | 0 | 0 | 30 |
| **Finished Petroleum Products** | **3** | **102,891** | **1,181** | **-1,338** | **0** | **26,687** | **0** | **0** | **753** | **128,671** | **112,525** |
| Finished Motor Gasoline | 0 | 55,105 | 153 | -3,662 | 0 | 18,758 | 0 | 0 | 8 | 70,346 | 52,465 |
| Finished Leaded Motor Gasoline | 0 | 9,386 | 9 | -188 | 0 | 3,925 | 0 | 0 | 2 | 13,130 | 14,457 |
| Finished Unleaded Motor Gasoline | 0 | 45,719 | 144 | -3,474 | 0 | 14,833 | 0 | 0 | 6 | 57,216 | 38,008 |
| Finished Aviation Gasoline | 0 | 177 | 0 | -7 | 0 | 126 | 0 | 0 | 0 | 296 | 513 |
| Naphtha-Type Jet Fuel | 0 | 668 | 101 | 134 | 0 | -21 | 0 | 0 | 0 | 882 | 828 |
| Kerosene-Type Jet Fuel | 0 | 4,958 | 201 | 547 | 0 | 2,204 | 0 | 0 | (s) | 7,909 | 7,639 |
| Kerosene | 0 | 221 | 0 | -47 | 0 | -127 | 0 | 0 | 1 | 46 | 1,731 |
| Distillate Fuel Oil | 0 | 20,728 | 189 | -409 | 0 | 5,364 | 0 | 0 | 64 | 25,808 | 30,952 |
| Residual Fuel Oil | 0 | 2,020 | 252 | 280 | 0 | -425 | 0 | 0 | 0 | 2,127 | 3,535 |
| Petrochemical Feedstocks[2] | 0 | 1,542 | 22 | 16 | 0 | 94 | 0 | 0 | 43 | 1,631 | 406 |
| Special Naphthas | 0 | 585 | 60 | -54 | 0 | 142 | 0 | 0 | 1 | 732 | 855 |
| Lubricants | 0 | 833 | 20 | 113 | 0 | 235 | 0 | 0 | 40 | 1,161 | 2,203 |
| Waxes | 0 | 39 | 13 | 5 | 0 | 0 | 0 | 0 | 2 | 55 | 110 |
| Petroleum Coke | 0 | 3,721 | 0 | 486 | 0 | 0 | 0 | 0 | 520 | 3,687 | 2,078 |
| Asphalt and Road Oil | 0 | 7,133 | 166 | 1,278 | 0 | 337 | 0 | 0 | 72 | 8,842 | 8,808 |
| Still Gas | 0 | 4,808 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,808 | 0 |
| Miscellaneous Products | 3 | 353 | 4 | -18 | 0 | 0 | 0 | 0 | 2 | 340 | 402 |
| **Total** | **35,547** | **105,780** | **20,465** | **5,480** | **-2,017** | **73,481** | **0** | **101,292** | **1,479** | **135,965** | **244,217** |

[1] Unaccounted for crude oil is a balancing item.

[2] Includes naphtha less than 400 degrees F endpoint and other oils equal to or greater than 400 degrees F endpoint.

(s) = Less than 500 barrels.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 8. PAD District III–Supply and Disposition of Crude Oil and Petroleum Products, August 1988
(Thousand Barrels)

| Commodity | Supply | | | | | | Disposition | | | | Ending Stocks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Field Production | Refinery Production | Imports by PADD of Entry | Stock Withdrawal (+) or Addition (-) | Unaccounted For Crude Oil[1] | Net Receipts | Crude Losses | Refinery Inputs | Exports | Products Supplied | |
| **Crude Oil (including lease condensate)** | E 110,385 | 0 | 92,650 | 6,711 | 8,605 | -27,862 | 1 | 190,488 | 0 | 0 | 713,670 |
| **Natural Gas Liquids and LRGs** | 33,546 | 9,670 | 3,855 | -4,753 | 0 | -1,270 | 0 | 8,410 | 531 | 32,107 | 81,026 |
| Liquefied Petroleum Gases | 27,471 | 9,670 | 3,855 | -4,657 | 0 | -968 | 0 | 4,256 | 531 | 30,584 | 74,895 |
| Pentanes Plus | 6,075 | 0 | 0 | -96 | 0 | -302 | 0 | 4,154 | 0 | 1,523 | 6,131 |
| **Other Liquids** | 1,041 | 0 | 6,746 | 201 | 0 | -112 | 0 | 8,156 | 0 | -280 | 67,200 |
| Other Hydrocarbons and Alcohol | 1,041 | 0 | 0 | -24 | 0 | 0 | 0 | 1,017 | 0 | 0 | 162 |
| Unfinished Oils | 0 | 0 | 6,490 | 848 | 0 | -154 | 0 | 7,655 | 0 | -471 | 51,934 |
| Motor Gasoline Blending Components | 0 | 0 | 256 | -615 | 0 | 42 | 0 | -508 | 0 | 191 | 15,048 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | -8 | 0 | 0 | 0 | -8 | 0 | 0 | 56 |
| **Finished Petroleum Products** | 95 | 207,029 | 3,782 | 1,371 | 0 | -101,715 | 0 | 0 | 8,053 | 102,509 | 128,560 |
| Finished Motor Gasoline | 10 | 99,405 | 101 | 322 | 0 | -61,201 | 0 | 0 | 436 | 38,201 | 48,115 |
| Finished Leaded Motor Gasoline | 9 | 16,368 | 0 | 425 | 0 | -9,659 | 0 | 0 | 130 | 7,013 | 10,442 |
| Finished Unleaded Motor Gasoline | 1 | 83,037 | 101 | -103 | 0 | -51,542 | 0 | 0 | 306 | 31,188 | 37,673 |
| Finished Aviation Gasoline | 0 | 543 | 0 | -9 | 0 | -395 | 0 | 0 | 0 | 139 | 558 |
| Naphtha-Type Jet Fuel | 0 | 2,722 | 0 | -232 | 0 | -491 | 0 | 0 | 20 | 1,979 | 2,567 |
| Kerosene-Type Jet Fuel | 0 | 17,107 | 374 | -1,403 | 0 | -12,578 | 0 | 0 | 24 | 3,476 | 14,801 |
| Kerosene | 0 | 1,898 | 0 | -316 | 0 | -255 | 0 | 0 | (s) | 1,327 | 2,213 |
| Distillate Fuel Oil | 41 | 39,559 | 0 | 601 | 0 | -24,325 | 0 | 0 | 1,031 | 14,845 | 28,281 |
| Residual Fuel Oil | 0 | 9,330 | 1,094 | 1,459 | 0 | 137 | 0 | 0 | 1,785 | 10,235 | 10,825 |
| Petrochemical Feedstocks[2] | 0 | 8,863 | 1,935 | -165 | 0 | -62 | 0 | 0 | 413 | 10,158 | 3,363 |
| Special Naphthas | 0 | 1,333 | 153 | 184 | 0 | -404 | 0 | 0 | 47 | 1,219 | 1,434 |
| Lubricants | 0 | 3,076 | 0 | 123 | 0 | -1,221 | 0 | 0 | 456 | 1,522 | 6,651 |
| Waxes | 0 | 288 | 1 | -13 | 0 | 0 | 0 | 0 | 44 | 232 | 471 |
| Petroleum Coke | 0 | 7,347 | 30 | 443 | 0 | 0 | 0 | 0 | 3,787 | 4,033 | 2,998 |
| Asphalt and Road Oil | 0 | 4,485 | 84 | 647 | 0 | -852 | 0 | 0 | (s) | 4,364 | 4,097 |
| Still Gas | 0 | 9,800 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9,800 | 0 |
| Miscellaneous Products | 44 | 1,273 | 10 | -270 | 0 | -68 | 0 | 0 | 10 | 979 | 2,186 |
| **Total** | 145,067 | 216,699 | 107,033 | 3,530 | 8,605 | -130,959 | 1 | 207,054 | 8,583 | 134,337 | 990,456 |

[1] Unaccounted for crude oil is a balancing item.
[2] Includes naphtha less than 400 degrees F endpoint and other oils equal to or greater than 400 degrees F endpoint.
(s) = Less than 500 barrels.
E = Estimated.
Note: Total may not equal sum of components due to independent rounding.
Sources and estimation procedures: See Explanatory Notes 1 and 2.

(Thousand Barrels)

| Commodity | Supply | | | | | | Disposition | | | | Ending Stocks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Field Production | Refinery Production | Imports by PADD of Entry | Stock Withdrawal (+) or Addition (-) | Unaccounted For Crude Oil[1] | Net Receipts | Crude Losses | Refinery Inputs | Exports | Products Supplied | |
| **Crude Oil (including lease condensate)** | E **17,019** | **0** | **2,121** | **1,067** | **1,508** | **-6,269** | **0** | **15,446** | **0** | **0** | **11,881** |
| **Natural Gas Liquids and LRGs** | **3,670** | **383** | **306** | **-30** | **0** | **-1,945** | **0** | **557** | **21** | **1,805** | **1,177** |
| Liquefied Petroleum Gases | 2,941 | 383 | 252 | -37 | 0 | -1,765 | 0 | 452 | 21 | 1,300 | 1,040 |
| Pentanes Plus | 729 | 0 | 54 | 7 | 0 | -180 | 0 | 105 | 0 | 505 | 137 |
| **Other Liquids** | **26** | **0** | **0** | **218** | **0** | **0** | **0** | **60** | **0** | **184** | **3,549** |
| Other Hydrocarbons and Alcohol | 26 | 0 | 0 | -10 | 0 | 0 | 0 | 16 | 0 | 0 | 28 |
| Unfinished Oils | 0 | 0 | 0 | 205 | 0 | 0 | 0 | -77 | 0 | 282 | 1,908 |
| Motor Gasoline Blending Components | 0 | 0 | 0 | 23 | 0 | 0 | 0 | 121 | 0 | -98 | 1,613 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Finished Petroleum Products** | **4** | **16,027** | **139** | **642** | **0** | **-71** | **0** | **0** | **8** | **16,733** | **11,364** |
| Finished Motor Gasoline | 0 | 8,128 | 72 | -198 | 0 | -76 | 0 | 0 | 0 | 7,926 | 4,234 |
| Finished Leaded Motor Gasoline | 0 | 3,058 | 9 | -188 | 0 | -330 | 0 | 0 | 0 | 2,549 | 1,904 |
| Finished Unleaded Motor Gasoline | 0 | 5,070 | 63 | -10 | 0 | 254 | 0 | 0 | 0 | 5,377 | 2,330 |
| Finished Aviation Gasoline | 0 | 54 | 0 | 3 | 0 | 26 | 0 | 0 | 0 | 83 | 45 |
| Naphtha-Type Jet Fuel | 0 | 471 | 0 | -9 | 0 | -117 | 0 | 0 | 0 | 345 | 369 |
| Kerosene-Type Jet Fuel | 0 | 887 | 0 | -23 | 0 | 549 | 0 | 0 | 0 | 1,413 | 812 |
| Kerosene | 0 | -12 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 1 | 34 |
| Distillate Fuel Oil | 0 | 3,864 | 64 | 173 | 0 | -453 | 0 | 0 | (s) | 3,648 | 2,989 |
| Residual Fuel Oil | 0 | 318 | 1 | -42 | 0 | 0 | 0 | 0 | 0 | 277 | 524 |
| Petrochemical Feedstocks[2] | 0 | -7 | 0 | 14 | 0 | 0 | 0 | 0 | (s) | 7 | 12 |
| Special Naphthas | 0 | -2 | 0 | -2 | 0 | 0 | 0 | 0 | 0 | -4 | 8 |
| Lubricants | 0 | 29 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 23 | 100 |
| Waxes | 0 | -12 | 2 | 35 | 0 | 0 | 0 | 0 | 0 | 25 | 92 |
| Petroleum Coke | 0 | 364 | 0 | -5 | 0 | 0 | 0 | 0 | (s) | 359 | 22 |
| Asphalt and Road Oil | 0 | 1,201 | 0 | 678 | 0 | 0 | 0 | 0 | 1 | 1,878 | 2,067 |
| Still Gas | 0 | 672 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 672 | 0 |
| Miscellaneous Products | 4 | 72 | 0 | 5 | 0 | 0 | 0 | 0 | (s) | 81 | 56 |
| **Total** | **20,719** | **16,410** | **2,566** | **1,897** | **1,508** | **-8,285** | **0** | **16,063** | **30** | **18,722** | **27,971** |

[1] Unaccounted for crude oil is a balancing item.

[2] Includes naphtha less than 400 degrees F endpoint and other oils equal to or greater than 400 degrees F endpoint.

(s) = Less than 500 barrels.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 10. PAD District V--Supply and Disposition of Crude Oil and Petroleum Products, August 1988
(Thousand Barrels)

| Commodity | Supply | | | | | | Disposition | | | | Ending Stocks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Field Produc-tion | Refinery Produc-tion | Imports by PADD of Entry | Stock With-drawal (+) or Addi-tion (-) | Unac-counted For Crude Oil[1] | Net Receipts | Crude Losses | Refinery Inputs | Exports | Products Supplied | |
| **Crude Oil (including lease condensate)** | E 95,840 | 0 | 6,311 | -1,273 | 616 | -13,887 | 1 | 82,021 | 4,668 | 917 | 74,997 |
| **Natural Gas Liquids and LRGs** | 2,701 | 2,170 | 172 | -401 | 0 | 0 | 0 | 767 | 238 | 3,638 | 3,323 |
| Liquefied Petroleum Gases | 1,310 | 2,170 | 172 | -334 | 0 | 0 | 0 | 600 | 238 | 2,481 | 3,197 |
| Pentanes Plus | 1,391 | 0 | 0 | -67 | 0 | 0 | 0 | 167 | 0 | 1,157 | 126 |
| **Other Liquids** | 409 | 0 | 0 | 1,050 | 0 | 0 | 0 | 1,818 | 0 | -359 | 35,570 |
| Other Hydrocarbons and Alcohol | 409 | 0 | 0 | 0 | 0 | 0 | 0 | 409 | 0 | 0 | 7 |
| Unfinished Oils | 0 | 0 | 0 | 129 | 0 | 0 | 0 | 760 | 0 | -631 | 28,587 |
| Motor Gasoline Blending Components | 0 | 0 | 0 | 899 | 0 | 0 | 0 | 627 | 0 | 272 | 6,949 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | 22 | 0 | 0 | 0 | 22 | 0 | 0 | 27 |
| **Finished Petroleum Products** | 0 | 86,857 | 2,611 | 1,034 | 0 | 2,977 | 0 | 0 | 9,674 | 83,806 | 55,864 |
| Finished Motor Gasoline | 0 | 37,621 | 1,128 | -1,096 | 0 | 1,724 | 0 | 0 | 27 | 39,350 | 21,071 |
| Finished Leaded Motor Gasoline | 0 | 10,073 | 58 | -481 | 0 | 610 | 0 | 0 | 16 | 10,244 | 6,193 |
| Finished Unleaded Motor Gasoline | 0 | 27,548 | 1,070 | -615 | 0 | 1,114 | 0 | 0 | 11 | 29,106 | 14,878 |
| Finished Aviation Gasoline | 0 | 203 | 4 | -45 | 0 | 0 | 0 | 0 | 0 | 162 | 443 |
| Naphtha-Type Jet Fuel | 0 | 1,629 | 4 | -161 | 0 | 361 | 0 | 0 | 0 | 1,833 | 1,729 |
| Kerosene-Type Jet Fuel | 0 | 10,027 | 1,052 | 286 | 0 | 185 | 0 | 0 | 401 | 11,150 | 7,205 |
| Kerosene | 0 | 142 | 0 | -3 | 0 | 0 | 0 | 0 | (s) | 139 | 235 |
| Distillate Fuel Oil | 0 | 13,141 | 66 | 1,407 | 0 | 761 | 0 | 0 | 1,043 | 14,332 | 10,882 |
| Residual Fuel Oil | 0 | 11,256 | 271 | -75 | 0 | 0 | 0 | 0 | 5,176 | 6,276 | 8,027 |
| Petrochemical Feedstocks[2] | 0 | 532 | 0 | -14 | 0 | 0 | 0 | 0 | 261 | 257 | 337 |
| Special Naphthas | 0 | 65 | 10 | 0 | 0 | 0 | 0 | 0 | 224 | -149 | 159 |
| Lubricants | 0 | 640 | 3 | 114 | 0 | -54 | 0 | 0 | 133 | 570 | 1,769 |
| Waxes | 0 | 75 | 2 | -7 | 0 | 0 | 0 | 0 | 7 | 63 | 121 |
| Petroleum Coke | 0 | 3,927 | 22 | 96 | 0 | 0 | 0 | 0 | 2,394 | 1,651 | 1,820 |
| Asphalt and Road Oil | 0 | 2,767 | 49 | 422 | 0 | 0 | 0 | 0 | 2 | 3,236 | 1,815 |
| Still Gas | 0 | 4,642 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,642 | 0 |
| Miscellaneous Products | 0 | 190 | 0 | 110 | 0 | 0 | 0 | 0 | 5 | 295 | 251 |
| **Total** | 98,950 | 89,027 | 9,095 | 410 | 616 | -10,910 | 1 | 84,606 | 14,579 | 88,001 | 169,754 |

[1] Unaccounted for crude oil is a balancing item.

[2] Includes naphtha less than 400 degrees F endpoint and other oils equal to or greater than 400 degrees F endpoint.

(s) = Less than 500 barrels.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 11. Production of Crude Oil by PAD District and State
(Thousand Barrels)

| PAD District and State | June 1988 |  | January - June |  |
|---|---|---|---|---|
|  | Total | Daily Average | Total | Daily Average |
| **PAD District I, Total** | **E 1,170** | **E 39** | **E 7,123** | **E 39** |
| Florida | 658 | 22 | 4,020 | 22 |
| New York | E 52 | E 2 | E 299 | E 2 |
| Pennsylvania | E 264 | E 9 | E 1,465 | E 8 |
| Virginia | E 1 | E 0 | E 11 | E 0 |
| West Virginia | 228 | 8 | 1,358 | 7 |
| Adjustment 1 | -33 | -1 | -30 | (s) |
| **PAD District II, Total** | **E 25,797** | **E 860** | **E 154,935** | **E 851** |
| Illinois | 1,990 | 66 | 11,995 | 66 |
| Indiana | 425 | 14 | 2,084 | 11 |
| Kansas | 5,027 | 168 | 29,561 | 162 |
| Kentucky | 490 | 16 | 2,733 | 15 |
| Michigan | E 1,943 | E 65 | E 12,074 | E 66 |
| Missouri | 10 | (s) | E 65 | E 0 |
| Nebraska | 492 | 16 | 2,877 | 16 |
| North Dakota | 3,289 | 110 | 19,888 | 109 |
| Ohio | E 941 | E 31 | E 5,464 | E 30 |
| Oklahoma | 10,717 | 357 | 65,785 | 361 |
| South Dakota | 134 | 4 | 842 | 5 |
| Tennessee | 49 | 2 | E 302 | E 2 |
| Adjustment 1 | 289 | 10 | 1,264 | 7 |
| **PAD District III, Total** | **E 109,137** | **E 3,638** | **E 672,326** | **E 3,694** |
| Alabama | 1,712 | 57 | 10,285 | 57 |
| Arkansas | E 1,140 | E 38 | E 6,923 | E 38 |
| Louisiana 2 | 13,341 | 445 | 83,837 | 461 |
| Mississippi | 2,189 | 73 | 13,590 | 75 |
| New Mexico | 5,792 | 193 | 35,378 | 194 |
| Texas 2 | 60,202 | 2,007 | 371,147 | 2,039 |
| Federal Offshore PAD District III | 24,549 | 818 | E 149,897 | E 824 |
| Adjustment 1 | 211 | 7 | 1,268 | 7 |
| **PAD District IV, Total** | **E 16,698** | **E 557** | **E 102,535** | **E 563** |
| Colorado | E 2,694 | E 90 | E 15,947 | E 88 |
| Montana | 1,933 | 64 | 11,824 | 65 |
| Utah | 2,746 | 92 | 17,071 | 94 |
| Wyoming | 9,361 | 312 | 57,944 | 318 |
| Adjustment 1 | -35 | -1 | -250 | -1 |
| **PAD District V, Total** | **91,929** | **3,064** | **567,376** | **3,117** |
| Alaska 2 | 59,520 | 1,984 | 369,547 | 2,030 |
| South Alaska | 1,290 | 43 | 7,842 | 43 |
| North Slope | 58,234 | 1,941 | 361,713 | 1,987 |
| Adjustment for Alaska 1 | -4 | (s) | -8 | (s) |
| Arizona | 9 | (s) | 57 | (s) |
| California 2 | 29,348 | 978 | 178,859 | 983 |
| Nevada | 266 | 9 | 1,562 | 9 |
| Federal Offshore PAD District V | 2,646 | 88 | 15,658 | 86 |
| Adjustment for Arizona, California, and Nevada 1 | 140 | 5 | 1,693 | 9 |
| **U.S. Total2** | **E 244,731** | **E 8,158** | **E 1,504,295** | **E 8,265** |

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[1] These adjustments are used to reconcile the national and PAD District level sums of the State data with the independently estimated U.S. and Alaskan figures shown in the Summary Statistics portion of this issue and with the PAD District level figures published in a previous issue. Final data at the State, PAD District, and national levels will be published without adjustments in the *Petroleum Supply Annual*.

[2] Includes the following current month offshore production (thousand barrels): Alaska: State - 4,052; California: State - 2,319; Louisiana: State - 2,042; Texas: State - 143; U.S. Total, including Federal offshore - E35,751.

(s) = Less than 500 barrels or less than 500 barrels per day.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Source: State Conservation Agencies and the U.S. Minerals Management Service.

## Table 12. Natural Gas Processing Plant Net Production of Petroleum Products by PAD District, August 1988
(Thousand Barrels)

| Commodity | PAD District I | | | PAD District II | | | | PAD District III | | | | | | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | East Coast | Appalachian No.1 | Total | Ind., Ill., Ky. * | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast | |
| **Natural Gas Liquids** | **288** | **625** | **913** | **744** | **466** | **8,187** | **9,397** | **18,913** | **3,101** | **7,205** | **673** | **3,654** | **33,546** | **3,670** | **2,701** | **50,227** |
| Pentanes Plus | 59 | 77 | 136 | 154 | 124 | 1,254 | 1,532 | 3,672 | 286 | 1,403 | 194 | 520 | 6,075 | 729 | 1,391 | 9,863 |
| Liquefied Petroleum Gases | 229 | 548 | 777 | 590 | 342 | 6,933 | 7,865 | 15,241 | 2,815 | 5,802 | 479 | 3,134 | 27,471 | 2,941 | 1,310 | 40,364 |
| Ethane | 87 | 190 | 277 | 126 | 1 | 2,665 | 2,792 | 6,291 | 985 | 2,477 | 108 | 1,442 | 11,303 | 969 | 2 | 15,343 |
| Propane | 85 | 245 | 330 | 277 | 200 | 2,794 | 3,271 | 5,610 | 1,179 | 1,973 | 194 | 1,075 | 10,031 | 1,238 | 357 | 15,227 |
| Normal Butane | 46 | 85 | 131 | 91 | 134 | 954 | 1,179 | 2,429 | -880 | 611 | 128 | 415 | 2,703 | 508 | 707 | 5,228 |
| Isobutane | 11 | 28 | 39 | 96 | 7 | 520 | 623 | 911 | 1,531 | 741 | 49 | 202 | 3,434 | 226 | 244 | 4,566 |
| **Finished Petroleum Products** | **0** | **0** | **0** | **1** | **0** | **2** | **3** | **34** | **50** | **0** | **11** | **0** | **95** | **4** | **0** | **102** |
| Finished Motor Gasoline | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 9 | 0 | 0 | 0 | 10 | 0 | 0 | 10 |
| Finished Leaded Motor Gasoline | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 9 | 0 | 0 | 9 |
| Finished Unleaded Motor Gasoline | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| Finished Aviation Gasoline | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Naphtha-Type Jet Fuel | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Kerosene-Type Jet Fuel | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Kerosene | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Distillate Fuel Oil | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 41 | 0 | 0 | 0 | 41 | 0 | 0 | 41 |
| Special Naphthas | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Miscellaneous Products | 0 | 0 | 0 | 1 | 0 | 2 | 3 | 33 | 0 | 0 | 11 | 0 | 44 | 4 | 0 | 51 |
| **Total Production** | **288** | **625** | **913** | **745** | **466** | **8,189** | **9,400** | **18,947** | **3,151** | **7,205** | **684** | **3,654** | **33,641** | **3,674** | **2,701** | **50,329** |

* Effective January 1987 "Appalachian No.2" is combined with "Ind., Ill., Ky.".
Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 13. Refinery Input of Crude Oil and Petroleum Products by PAD District, August 1988

(Thousand Barrels, Except Where Noted)

| Commodity | PAD District I | | | PAD District II | | | | PAD District III | | | | | | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | East Coast | Appalachian No.1 | Total | Ind., Ill., Ky. * | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N. La., Ark. | New Mexico | Total | Rocky Mt | West Coast | |
| **Crude Oil (including lease condensate)** | **40,406** | **3,180** | **43,586** | **63,838** | **10,480** | **21,852** | **96,170** | **15,285** | **97,865** | **69,320** | **5,736** | **2,282** | **190,488** | **15,446** | **82,021** | **427,711** |
| **Natural Gas Liquids** | | | | | | | | | | | | | | | | |
| Pentanes Plus | 35 | 0 | 35 | 481 | 24 | 676 | 1,181 | 944 | 1,929 | 931 | 183 | 167 | 4,154 | 105 | 167 | 5,642 |
| Liquefied Petroleum Gases | 75 | 20 | 95 | 1,382 | 112 | 582 | 2,076 | 552 | 1,556 | 2,002 | 106 | 40 | 4,256 | 452 | 600 | 7,479 |
| Ethane | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 58 | 0 | 0 | 58 | 0 | 0 | 58 |
| Propane | 0 | 0 | 0 | 83 | 0 | 0 | 83 | 1 | 120 | 48 | 0 | 0 | 169 | 0 | 11 | 263 |
| Normal Butane | 29 | 20 | 49 | 429 | 50 | 67 | 546 | 164 | 335 | 651 | 13 | 0 | 1,163 | 316 | 322 | 2,396 |
| Isobutane | 46 | 0 | 46 | 870 | 62 | 515 | 1,447 | 387 | 1,101 | 1,245 | 93 | 40 | 2,866 | 136 | 267 | 4,762 |
| **Other Liquids** | | | | | | | | | | | | | | | | |
| Other Hydrocarbons and Alcohol | 44 | 0 | 44 | 604 | 2 | 0 | 606 | 0 | 575 | 421 | 0 | 21 | 1,017 | 16 | 409 | 2,092 |
| Unfinished Oil (net) | 4,766 | 219 | 4,985 | 733 | 3 | 453 | 1,189 | 139 | 5,086 | 2,446 | -62 | 46 | 7,655 | -77 | 760 | 14,512 |
| Motor Gasoline Blending Components (net) | 1,697 | -23 | 1,674 | 136 | 50 | -321 | -135 | 6 | -299 | -204 | -7 | -4 | -508 | 121 | 627 | 1,779 |
| Aviation Gasoline Blending Components (net) | 0 | 0 | 0 | 199 | 0 | 6 | 205 | 0 | 0 | -8 | 0 | 0 | -8 | 0 | 22 | 219 |
| **Total Input to Refineries** | **47,023** | **3,396** | **50,419** | **67,373** | **10,671** | **23,248** | **101,292** | **16,926** | **106,712** | **74,908** | **5,956** | **2,552** | **207,054** | **16,063** | **84,606** | **459,434** |
| **Crude Oil Distillation** | | | | | | | | | | | | | | | | |
| Gross Input (daily average) | 1,306 | 103 | 1,409 | 2,067 | 339 | 706 | 3,112 | 496 | 3,168 | 2,288 | 183 | 72 | 6,207 | 506 | 2,709 | 13,943 |
| Operable Capacity (daily average) | 1,352 | 109 | 1,462 | 2,253 | 332 | 734 | 3,320 | 587 | 3,603 | 2,947 | 255 | 76 | 7,467 | 534 | 3,176 | 15,958 |
| Operating Ratio (percent)[1] | 96.6 | 94.0 | 96.4 | 91.8 | 101.9 | 96.2 | 93.7 | 84.6 | 87.9 | 77.6 | 71.9 | 95.8 | 83.1 | 94.8 | 85.3 | 87.4 |
| **Downstream Processing** | | | | | | | | | | | | | | | | |
| **Fresh Feed Input (daily average)** | | | | | | | | | | | | | | | | |
| Catalytic Cracking | 552 | 18 | 570 | 749 | 112 | 244 | 1,105 | 182 | 1,305 | 740 | 30 | 27 | 2,284 | 179 | 662 | 4,800 |
| Catalytic Hydrocracking | 54 | 0 | 54 | 130 | 0 | 6 | 136 | 16 | 182 | 172 | 0 | 0 | 370 | 5 | 447 | 1,012 |
| Cokers | 71 | 0 | 71 | 154 | 40 | 72 | 267 | 9 | 206 | 322 | 10 | 0 | 547 | 16 | 438 | 1,338 |
| **Crude Oil Qualities** | | | | | | | | | | | | | | | | |
| Sulfur Content, Weighted Average (percent) | 1.22 | .65 | 1.17 | 1.09 | 2.15 | 58 | 1.09 | 73 | .87 | 1.32 | 1.35 | .85 | 1.04 | 70 | 1.09 | 1.06 |
| API Gravity, Weighted Average | 30.36 | 38.05 | 30.93 | 34.29 | 28.87 | 36.51 | 34.19 | 38.38 | 34.13 | 31.31 | 33.67 | 40.24 | 33.48 | 35.69 | 25.70 | 31.93 |
| **Operable Capacity (daily average)** | **1,352** | **109** | **1,462** | **2,253** | **332** | **734** | **3,320** | **587** | **3,603** | **2,947** | **255** | **76** | **7,467** | **534** | **3,176** | **15,958** |
| Operating | 1,339 | 109 | 1,449 | 2,187 | 332 | 734 | 3,253 | 528 | 3,412 | 2,373 | 238 | 76 | 6,626 | 534 | 3,047 | 14,908 |
| Idle | 13 | 0 | 13 | 67 | 0 | 0 | 67 | 59 | 191 | 574 | 17 | 0 | 841 | 0 | 129 | 1,050 |
| **Alaskan Crude Oil Receipts** | **1,352** | **0** | **1,352** | **1,585** | **0** | **224** | **1,809** | **0** | **4,514** | **3,233** | **156** | **0** | **7,903** | **0** | **46,006** | **57,070** |

[1] Represents gross input divided by operable capacity.

(s) - Less than 500 barrels.

* Effective January 1987 "Appalachian No.2" is combined with "Ind., Ill., Ky.".

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 14. Refinery Net Production of Petroleum Products by PAD District, August 1988
(Thousand Barrels)

| Commodity | PAD District I | | | PAD District II | | | | PAD District III | | | | | | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | East Coast | Appalachian No.1 | Total | Ind., Ill., Ky. * | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast | |
| Liquefied Refinery Gases | 1,771 | 26 | 1,797 | 2,125 | 270 | 494 | 2,889 | 336 | 4,702 | 4,409 | 112 | 111 | 9,670 | 383 | 2,170 | 16,909 |
| Ethane | 167 | 0 | 167 | 13 | 0 | 0 | 13 | -32 | 270 | 14 | 0 | 0 | 252 | 0 | 0 | 432 |
| Propane | 1,318 | 26 | 1,344 | 2,084 | 227 | 491 | 2,802 | 452 | 3,552 | 1,968 | 82 | 63 | 6,117 | 240 | 1,152 | 11,655 |
| Normal Butane | 270 | 0 | 270 | 31 | 24 | -1 | 54 | -281 | 842 | 2,421 | 30 | 36 | 3,048 | 161 | 883 | 4,416 |
| Isobutane | 16 | 0 | 16 | -3 | 19 | 4 | 20 | 197 | 38 | 6 | 0 | 12 | 253 | -18 | 135 | 406 |
| Finished Motor Gasoline | 21,803 | 1,239 | 23,042 | 37,550 | 5,161 | 12,394 | 55,105 | 8,956 | 52,386 | 34,942 | 1,736 | 1,385 | 99,405 | 8,128 | 37,621 | 223,301 |
| Finished Leaded Motor Gasoline | 1,759 | 265 | 2,024 | 4,956 | 1,008 | 3,422 | 9,386 | 2,457 | 6,913 | 6,270 | 240 | 488 | 16,368 | 3,058 | 10,073 | 40,909 |
| Finished Unleaded Motor Gasoline | 20,044 | 974 | 21,018 | 32,594 | 4,153 | 8,972 | 45,719 | 6,499 | 45,473 | 28,672 | 1,496 | 897 | 83,037 | 5,070 | 27,548 | 182,392 |
| Finished Aviation Gasoline | 23 | 0 | 23 | 130 | 24 | 23 | 177 | 150 | 224 | 169 | 0 | 0 | 543 | 54 | 203 | 1,000 |
| Naphtha-Type Jet Fuel | 898 | 0 | 898 | 391 | 7 | 270 | 668 | 650 | 815 | 760 | 158 | 339 | 2,722 | 471 | 1,629 | 6,388 |
| Kerosene-Type Jet Fuel | 2,310 | -3 | 2,307 | 3,227 | 502 | 1,229 | 4,958 | 1,000 | 8,236 | 7,603 | 221 | 47 | 17,107 | 887 | 10,027 | 35,286 |
| Kerosene | 184 | 65 | 249 | 210 | 9 | 2 | 221 | 85 | 1,389 | 413 | 11 | 0 | 1,898 | -12 | 142 | 2,498 |
| Distillate Fuel Oil | 9,767 | 1,079 | 10,846 | 12,382 | 2,619 | 5,727 | 20,728 | 3,502 | 19,441 | 14,557 | 1,564 | 495 | 39,559 | 3,864 | 13,141 | 88,138 |
| Residual Fuel Oil | 3,792 | 45 | 3,837 | 1,647 | 222 | 151 | 2,020 | 409 | 4,771 | 3,885 | 251 | 14 | 9,330 | 318 | 11,256 | 26,761 |
| Naphtha < 400 Deg. for Petro. Feed. Use | 217 | 0 | 217 | 663 | 0 | 69 | 732 | 125 | 2,135 | 76 | 37 | 2 | 2,375 | -16 | 172 | 3,480 |
| Other Oils > 400 Deg. for Petro. Feed. Use | 14 | 0 | 14 | 753 | 0 | 57 | 810 | 169 | 4,427 | 1,892 | 0 | 0 | 6,488 | 9 | 360 | 7,681 |
| Special Naphthas | 208 | 26 | 234 | 370 | 0 | 215 | 585 | 85 | 1,014 | 66 | 168 | 0 | 1,333 | -2 | 65 | 2,215 |
| Lubricants | 351 | 351 | 702 | 486 | 0 | 347 | 833 | 29 | 1,972 | 600 | 475 | 0 | 3,076 | 29 | 640 | 5,280 |
| Waxes | 0 | 90 | 90 | 10 | 0 | 29 | 39 | 12 | 160 | 53 | 63 | 0 | 288 | -12 | 75 | 480 |
| Petroleum Coke | 1,332 | 26 | 1,358 | 2,456 | 470 | 795 | 3,721 | 372 | 3,482 | 3,340 | 132 | 21 | 7,347 | 364 | 3,927 | 16,717 |
| Marketable | 316 | 0 | 316 | 1,401 | 321 | 501 | 2,223 | 50 | 1,673 | 2,486 | 80 | 0 | 4,289 | 147 | 2,900 | 9,875 |
| Catalyst | 1,016 | 26 | 1,042 | 1,055 | 149 | 294 | 1,498 | 322 | 1,809 | 854 | 52 | 21 | 3,058 | 217 | 1,027 | 6,842 |
| Asphalt and Road Oil | 4,254 | 274 | 4,528 | 4,563 | 1,450 | 1,120 | 7,133 | 530 | 1,156 | 1,797 | 901 | 101 | 4,485 | 1,201 | 2,767 | 20,114 |
| Still Gas | 2,024 | 164 | 2,188 | 3,303 | 328 | 1,177 | 4,808 | 801 | 5.462 | 3,232 | 204 | 101 | 9,800 | 672 | 4,642 | 22,110 |
| Miscellaneous Products | 400 | 48 | 448 | 259 | 41 | 53 | 353 | 20 | 759 | 494 | 0 | 0 | 1,273 | 72 | 190 | 2,336 |
| Fuel Use | 14 | -1 | 13 | 0 | 0 | 0 | 0 | 1 | 0 | 44 | 0 | 0 | 45 | 0 | 6 | 64 |
| Non-Fuel Use | 386 | 49 | 435 | 259 | 41 | 53 | 353 | 19 | 759 | 450 | 0 | 0 | 1,228 | 72 | 184 | 2,272 |
| **Total Production** | **49,348** | **3,430** | **52,778** | **70,525** | **11,103** | **24,152** | **105,780** | **17,231** | **112,531** | **78,288** | **6,033** | **2,616** | **216,699** | **16,410** | **89,027** | **480,694** |
| Processing Gain(-) or Loss(+)[1] | -2,325 | -34 | -2,359 | -3,152 | -432 | -904 | -4,488 | -305 | -5,819 | -3,380 | -77 | -64 | -9,645 | -347 | -4,421 | -21,260 |

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[1] Represents the arithmetic difference between input and output.

* Effective January 1987 "Appalachian No.2" is combined with "Ind., Ill., Ky.".

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 15. Percent Refinery Yield of Petroleum Products by PAD District,[1] August 1988

| Commodity | PAD District I | | | PAD District II | | | | PAD District III | | | | | | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | East Coast | Appalachian No.1 | Total | Ind., Ill., Ky. * | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast | |
| Liquefied Refinery Gases | 3.9 | 0.8 | 3.7 | 3.3 | 2.6 | 2.2 | 3.0 | 2.2 | 4.6 | 6.1 | 2.0 | 4.8 | 4.9 | 2.5 | 2.6 | 3.8 |
| Finished Motor Gasoline[2] | 44.2 | 36.5 | 43.6 | 54.1 | 47.4 | 51.4 | 52.8 | 48.3 | 47.2 | 44.3 | 25.6 | 49.9 | 45.7 | 48.4 | 43.3 | 46.7 |
| Finished Aviation Gasoline[3] | .1 | .0 | .0 | -.1 | .2 | .1 | .0 | 1.0 | .2 | .2 | .0 | .0 | .3 | .4 | .2 | .2 |
| Naphtha-Type Jet Fuel | 2.0 | 0 | 1.8 | .6 | .1 | 1.2 | .7 | 4.2 | .8 | 1.1 | 2.8 | 14.6 | 1.4 | 3.1 | 2.0 | 1.4 |
| Kerosene-Type Jet Fuel | 5.1 | -.1 | 4.7 | 5.0 | 4.8 | 5.5 | 5.1 | 6.5 | 8.0 | 10.6 | 3.9 | 2.0 | 8.6 | 5.8 | 12.1 | 8.0 |
| Kerosene | .4 | 1.9 | .5 | .3 | .1 | .0 | .2 | .6 | 1.3 | .6 | .2 | 0 | 1.0 | -.1 | .2 | .6 |
| Distillate Fuel Oil | 21.6 | 31.7 | 22.3 | 19.2 | 25.0 | 25.7 | 21.3 | 22.7 | 18.9 | 20.3 | 27.6 | 21.3 | 20.0 | 25.1 | 15.9 | 19.9 |
| Residual Fuel Oil | 8.4 | 1.3 | 7.9 | 2.6 | 2.1 | .7 | 2.1 | 2.7 | 4.6 | 5.4 | 4.4 | .6 | 4.7 | 2.1 | 13.6 | 6.1 |
| Naphtha < 400 Deg. for Petro. Feed. Use | .5 | 0 | .4 | 1.0 | 0 | .3 | .8 | .8 | 2.1 | .1 | .7 | .1 | 1.2 | -.1 | .2 | .8 |
| Other Oils > 400 Deg. for Petro. Feed. Use | .0 | 0 | .0 | 1.2 | 0 | .3 | .8 | 1.1 | 4.3 | 2.6 | 0 | 0 | 3.3 | .1 | .4 | 1.7 |
| Special Naphthas | .5 | .8 | .5 | .6 | 0 | 1.0 | .6 | .6 | 1.0 | .1 | 3.0 | 0 | .7 | .0 | 1 | .5 |
| Lubricants | .8 | 10.3 | 1.4 | .8 | 0 | 1.6 | .9 | .2 | 1.9 | .8 | 8.4 | 0 | 1.6 | .2 | .8 | 1.2 |
| Waxes | 0 | 2.6 | .2 | .0 | 0 | .1 | .0 | .1 | .2 | .1 | 1.1 | 0 | .1 | -.1 | .1 | .1 |
| Petroleum Coke | 2.9 | .8 | 2.8 | 3.8 | 4.5 | 3.6 | 3.8 | 2.4 | 3.4 | 4.7 | 2.3 | .9 | 3.7 | 2.4 | 4.7 | 3.8 |
| Asphalt and Road Oil | 9.4 | 8.1 | 9.3 | 7.1 | 13.8 | 5.0 | 7.3 | 3.4 | 1.1 | 2.5 | 15.9 | 4.3 | 2.3 | 7.8 | 3.3 | 4.5 |
| Still Gas | 4.5 | 4.8 | 4.5 | 5.1 | 3.1 | 5.3 | 4.9 | 5.2 | 5.3 | 4.5 | 3.6 | 4.3 | 4.9 | 4.4 | 5.6 | 5.0 |
| Miscellaneous Products | .9 | 1.4 | .9 | .4 | 4 | .2 | .4 | .1 | .7 | .7 | 0 | 0 | .6 | .5 | .2 | 5 |
| Processing Gain(-) or Loss(+)[4] | -5.1 | -1.0 | -4.9 | -4.9 | -4.1 | -4.1 | -4.6 | -2.0 | -5.7 | -4.7 | -1.4 | -2.7 | -4.9 | -2.3 | -5.3 | -4.8 |

[1] Based on crude oil input and net reruns of unfinished oils.

[2] Based on total finished motor gasoline output plus net output of motor gasoline blending components, minus input of natural gas plant liquids, other hydrocarbons and alcohol

[3] Based on finished aviation gasoline output plus net output of aviation gasoline blending components

[4] Represents the difference between Input and Production.

Note: Total may not equal sum of components due to independent rounding

* Effective January 1987 "Appalachian No.2" is combined with "Ind., Ill., Ky.".

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 16. Imports of Crude Oil and Petroleum Products by PAD District, August 1988
(Thousand Barrels)

| Commodity | Petroleum Administration for Defense Districts | | | | | | Daily Average |
|---|---|---|---|---|---|---|---|
| | I | II | III | IV | V | Total | |
| **Crude Oil (including lease condensate)** [1][2] | **38,374** | **23,087** | **86,301** | **2,121** | **6,311** | **156,194** | **5,039** |
| **Natural Gas Liquids** | **1,200** | **2,547** | **3,855** | **306** | **172** | **8,079** | **261** |
| Pentanes Plus | 507 | 35 | 0 | 54 | 0 | 596 | 19 |
| Liquefied Petroleum Gases | 693 | 2,512 | 3,855 | 252 | 172 | 7,483 | 241 |
| Ethane | 1 | 81 | 0 | 0 | 1 | 83 | 3 |
| Propane | 533 | 1,634 | 1,411 | 113 | 29 | 3,720 | 120 |
| Normal Butane | 103 | 518 | 1,573 | 90 | 93 | 2,377 | 77 |
| Isobutane | 55 | 279 | 870 | 49 | 50 | 1,303 | 42 |
| **Other Liquids** [1] | **5,078** | **0** | **6,746** | **0** | **0** | **11,824** | **381** |
| Unfinished Oils [1] | 3,323 | 0 | 6,490 | 0 | 0 | 9,813 | 317 |
| Naphthas and Lighter | 4 | 0 | 2,013 | 0 | 0 | 2,017 | 65 |
| Kerosene and Light Gas Oils | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Heavy Gas Oils | 2,930 | 0 | 652 | 0 | 0 | 3,582 | 116 |
| Residuum | 389 | 0 | 3,825 | 0 | 0 | 4,214 | 136 |
| Motor Gasoline Blending Components | 1,755 | 0 | 256 | 0 | 0 | 2,011 | 65 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Finished Petroleum Products** | **38,577** | **1,181** | **3,782** | **139** | **2,611** | **46,290** | **1,493** |
| Finished Motor Gasoline | 12,963 | 153 | 101 | 72 | 1,128 | 14,417 | 465 |
| Finished Leaded Motor Gasoline | 136 | 9 | 0 | 9 | 58 | 212 | 7 |
| Finished Unleaded Motor Gasoline | 12,827 | 144 | 101 | 63 | 1,070 | 14,205 | 458 |
| Finished Aviation Gasoline | 0 | 0 | 0 | 0 | 4 | 4 | (s) |
| Naphtha-Type Jet Fuel | 0 | 101 | 0 | 0 | 4 | 105 | 3 |
| Kerosene-Type Jet Fuel | 1,460 | 201 | 374 | 0 | 1,052 | 3,087 | 100 |
| Bonded Aircraft Fuel | 1,112 | 201 | 145 | 0 | 496 | 1,954 | 63 |
| Other | 348 | 0 | 229 | 0 | 556 | 1,133 | 37 |
| Kerosene | 235 | 0 | 0 | 0 | 0 | 235 | 8 |
| Distillate Fuel Oil | 8,058 | 189 | 0 | 64 | 66 | 8,377 | 270 |
| Bonded Ships Bunkers | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 8,058 | 189 | 0 | 64 | 66 | 8,377 | 270 |
| Residual Fuel Oil | 14,346 | 252 | 1,094 | 1 | 271 | 15,964 | 515 |
| Bonded Ships Bunkers | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 14,346 | 252 | 1,094 | 1 | 271 | 15,964 | 515 |
| Naphtha < 400 Deg. for Petro. Feed. Use | 187 | 22 | 1,935 | 0 | 0 | 2,144 | 69 |
| Other Oils > 400 Deg. for Petro. Feed. Use | 228 | 0 | 0 | 0 | 0 | 228 | 7 |
| Special Naphthas | 82 | 60 | 153 | 0 | 10 | 305 | 10 |
| Lubricants | 41 | 20 | 0 | 0 | 3 | 64 | 2 |
| Waxes | 21 | 13 | 1 | 2 | 2 | 39 | 1 |
| Petroleum Coke | 0 | 0 | 30 | 0 | 22 | 52 | 2 |
| Asphalt and Road Oil | 956 | 166 | 84 | 0 | 49 | 1,255 | 40 |
| Miscellaneous Products | 0 | 4 | 10 | 0 | 0 | 14 | (s) |
| **Total Imports** | **83,229** | **26,814** | **100,684** | **2,566** | **9,095** | **222,387** | **7,174** |

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[1] Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

[2] Includes crude oil imported for storage in the Strategic Petroleum Reserve.

(s) = Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

(Thousand Barrels)

| Commodity | Petroleum Administration for Defense Districts | | | | | | Total (Daily Average) |
|---|---|---|---|---|---|---|---|
| | I | II | III | IV | V | Total | |
| **Crude Oil (including lease condensate)** 1 2 | **280,893** | **219,614** | **652,271** | **15,099** | **38,935** | **1,206,812** | **4,946** |
| **Natural Gas Liquids** | **10,651** | **20,970** | **15,403** | **3,165** | **2,038** | **52,226** | **214** |
| Pentanes plus | 2,046 | 272 | 221 | 207 | 0 | 2,746 | 11 |
| Liquefied Petroleum Gases | 8,605 | 20,698 | 15,182 | 2,958 | 2,038 | 49,480 | 203 |
| Ethane | 37 | 191 | 62 | 1 | 37 | 327 | 1 |
| Propane | 5,478 | 13,635 | 4,712 | 1,464 | 356 | 25,644 | 105 |
| Normal Butane | 1,914 | 4,303 | 6,651 | 934 | 1,032 | 14,835 | 61 |
| Isobutane | 1,176 | 2,568 | 3,758 | 559 | 614 | 8,674 | 36 |
| **Other Liquids** 1 | **41,260** | **1,126** | **58,492** | **0** | **1,162** | **102,040** | **418** |
| Unfinished Oils 1 | 28,365 | 1,105 | 57,352 | 0 | 855 | 87,677 | 359 |
| Naphthas and Lighter | 1,777 | 238 | 12,556 | 0 | 254 | 14,825 | 61 |
| Kerosene and Light Gas Oils | 217 | 0 | 1,584 | 0 | 0 | 1,801 | 7 |
| Heavy Gas Oils | 20,268 | 499 | 7,644 | 0 | 357 | 28,768 | 118 |
| Residuum | 6,103 | 368 | 35,568 | 0 | 244 | 42,283 | 173 |
| Motor Gasoline Blending Components | 12,895 | 21 | 1,140 | 0 | 307 | 14,363 | 59 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Finished Petroleum Products** | **293,525** | **8,392** | **29,271** | **1,009** | **13,000** | **345,197** | **1,415** |
| Finished Motor Gasoline | 85,829 | 853 | 2,668 | 424 | 5,477 | 95,251 | 390 |
| Finished Leaded Motor Gasoline | 3,044 | 27 | 39 | 27 | 205 | 3,342 | 14 |
| Finished Unleaded Motor Gasoline | 82,785 | 826 | 2,629 | 397 | 5,272 | 91,909 | 377 |
| Finished Aviation Gasoline | 0 | 0 | 13 | 0 | 104 | 117 | (s) |
| Naphtha-Type Jet Fuel | 0 | 698 | 0 | 0 | 27 | 725 | 3 |
| Kerosene-Type Jet Fuel | 12,852 | 3,648 | 989 | 0 | 3,026 | 20,515 | 84 |
| Bonded Aircraft Fuel | 7,854 | 3,648 | 609 | 0 | 2,171 | 14,282 | 59 |
| Other | 4,998 | 0 | 380 | 0 | 855 | 6,233 | 26 |
| Kerosene | 2,102 | 0 | 716 | 0 | 0 | 2,818 | 12 |
| Distillate Fuel Oil | 59,358 | 1,249 | 602 | 557 | 687 | 62,453 | 256 |
| Bonded Ships Bunkers | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 59,358 | 1,249 | 602 | 557 | 687 | 62,453 | 256 |
| Residual Fuel Oil | 122,092 | 869 | 6,286 | 1 | 2,481 | 131,729 | 540 |
| Bonded Ships Bunkers | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 122,092 | 869 | 6,286 | 1 | 2,481 | 131,729 | 540 |
| Naphtha < 400 Deg. for Petro. Feed. Use | 1,545 | 115 | 14,344 | 0 | 219 | 16,223 | 66 |
| Other Oils > 400 Deg. for Petro. Feed. Use | 228 | 0 | 545 | 0 | 214 | 987 | 4 |
| Special Naphthas | 395 | 443 | 2,400 | 1 | 67 | 3,306 | 14 |
| Lubricants | 2,060 | 101 | 184 | 0 | 73 | 2,418 | 10 |
| Waxes | 231 | 104 | 14 | 7 | 38 | 394 | 2 |
| Petroleum Coke | 37 | 0 | 134 | 0 | 148 | 319 | 1 |
| Asphalt and Road Oil | 6,477 | 286 | 331 | 19 | 439 | 7,552 | 31 |
| Miscellaneous Products | 319 | 26 | 45 | 0 | 0 | 390 | 2 |
| **Total Imports** | **626,329** | **250,101** | **755,437** | **19,273** | **55,135** | **1,706,276** | **6,993** |

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[1] Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

[2] Includes crude oil imported for storage in the Strategic Petroleum Reserve.

(s) = Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 18. Imports of Crude Oil and Petroleum Products by Source and PAD District,[1] August 1988
(Thousand Barrels)

| Source | Crude Oil [2] | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Products [3] | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | All PAD Districts | | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Algeria | 3,151 | 340 | 389 | 0 | 0 | 0 | 0 | 893 | 1,282 | 0 | 1,789 | 4,693 | 7,844 | 253 |
| Iraq | 13,620 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13,620 | 439 |
| Kuwait | 4,857 | 425 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 425 | 5,282 | 170 |
| Saudi Arabia | 27,862 | 2,660 | 3,605 | 0 | 1,027 | 426 | 0 | 424 | 0 | 0 | 0 | 8,143 | 36,005 | 1,161 |
| Subtotal Arab OPEC | 49,490 | 3,426 | 3,994 | 0 | 1,027 | 426 | 0 | 1,317 | 1,282 | 0 | 1,789 | 13,261 | 62,751 | 2,024 |
| **Other OPEC** | | | | | | | | | | | | | | |
| Ecuador | 1,114 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 180 | 0 | 0 | 180 | 1,294 | 42 |
| Gabon | 556 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 556 | 18 |
| Indonesia | 4,758 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,758 | 153 |
| Nigeria | 16,852 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 411 | 0 | 0 | 411 | 17,263 | 557 |
| Venezuela | 13,057 | 90 | 1,468 | 233 | 3,112 | 723 | 0 | 3,254 | 2,507 | 0 | 631 | 12,018 | 25,075 | 809 |
| Subtotal Other OPEC | 36,337 | 90 | 1,468 | 233 | 3,112 | 723 | 0 | 3,254 | 3,098 | 0 | 631 | 12,609 | 48,946 | 1,579 |
| **Other** | | | | | | | | | | | | | | |
| Angola | 6,643 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6,643 | 214 |
| Argentina | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 61 | 0 | 61 | 61 | 2 |
| Australia | 1,439 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,439 | 46 |
| Bahama Islands | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 362 | 0 | 0 | 362 | 362 | 12 |
| Belgium | 0 | 0 | 293 | 274 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 570 | 570 | 18 |
| Brazil | 0 | 87 | 0 | 23 | 2,773 | 0 | 0 | 0 | 316 | 25 | 7 | 3,231 | 3,231 | 104 |
| Cameroon | 3,028 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 333 | 0 | 0 | 333 | 3,361 | 108 |
| Canada | 21,946 | 3,227 | 403 | 0 | 1,236 | 223 | 19 | 1,298 | 1,821 | 150 | 763 | 9,140 | 31,086 | 1,003 |
| China, People's Republic | 1,979 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,979 | 64 |
| China, Taiwan | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 3 | (s) |
| Colombia | 1,559 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 891 | 0 | 0 | 891 | 2,450 | 79 |
| Congo | 2,204 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 165 | 0 | 0 | 165 | 2,369 | 76 |
| Egypt | 1,820 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,820 | 59 |
| France | 0 | 1 | 0 | 105 | 243 | 0 | 0 | 0 | 0 | 0 | 0 | 349 | 349 | 11 |
| Germany, DR (E) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 288 | 0 | 0 | 0 | 288 | 288 | 9 |
| Germany, FD (W) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 302 | 22 | 1 | 325 | 325 | 10 |
| Greece | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 312 | 0 | 0 | 312 | 312 | 10 |
| Guatemala | 220 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 220 | 7 |
| India | 0 | 0 | 842 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 842 | 842 | 27 |
| Israel | 0 | 0 | 0 | 0 | 234 | 0 | 0 | 0 | 0 | 0 | 0 | 234 | 234 | 8 |
| Italy | 0 | 0 | 425 | 33 | 707 | 0 | 0 | 0 | 0 | 0 | 0 | 1,165 | 1,165 | 38 |
| Japan | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 35 | 36 | 36 | 1 |
| Korea, Republic | 0 | 0 | 0 | 0 | 0 | 248 | 0 | 0 | 0 | 0 | 0 | 248 | 248 | 8 |
| Malaysia | 484 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 484 | 16 |
| Mexico | 18,785 | 649 | 0 | 0 | 285 | 346 | 0 | 205 | 686 | 0 | 483 | 2,654 | 21,439 | 692 |
| Netherlands Antilles | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 226 | 342 | 0 | 59 | 627 | 627 | 20 |
| Netherlands | 0 | 0 | 100 | 0 | 1,158 | 0 | 0 | 0 | 290 | 47 | 17 | 1,612 | 1,612 | 52 |
| Norway | 2,457 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 2,557 | 82 |
| Peru | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 870 | 0 | 0 | 870 | 870 | 28 |
| Portugal | 0 | 0 | 0 | 0 | 221 | 0 | 0 | 0 | 236 | 0 | 0 | 457 | 457 | 15 |
| Puerto Rico | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 224 | 224 | 224 | 7 |
| Romania | 0 | 0 | 0 | 1,174 | 873 | 0 | 0 | 416 | 330 | 0 | 0 | 2,793 | 2,793 | 90 |
| Singapore | 0 | 0 | 0 | 0 | 0 | 644 | 0 | 0 | 193 | 0 | 0 | 837 | 837 | 27 |
| South Africa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 17 | 17 | 1 |

See footnotes at end of table.

## Table 18. Imports of Crude Oil and Petroleum Products by Source and PAD District,[1] August 1988 (continued)
(Thousand Barrels)

| Source | Crude Oil [2] | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Products [3] | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **All PAD Districts (continued)** | | | | | | | | | | | | | | |
| **Other (continued)** | | | | | | | | | | | | | | |
| Spain | 0 | 0 | 0 | 0 | 1,294 | 236 | 0 | 219 | 798 | 0 | 199 | 2,746 | 2,746 | 89 |
| Sweden | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 65 | 0 | 0 | 65 | 65 | 2 |
| Syria | 0 | 0 | 538 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 538 | 538 | 17 |
| Thailand | 446 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 446 | 14 |
| Trinidad and Tobago | 2,438 | 0 | 0 | 0 | 149 | 0 | 0 | 85 | 326 | 0 | 0 | 560 | 2,998 | 97 |
| Turkey | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 52 | 52 | 52 | 2 |
| United Kingdom | 1,646 | 2 | 0 | 0 | 712 | 0 | 0 | 0 | 844 | 0 | 13 | 1,571 | 3,217 | 104 |
| U.S.S.R. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 717 | 0 | 0 | 717 | 717 | 23 |
| Virgin Islands | 0 | 0 | 1,750 | 169 | 393 | 346 | 216 | 1,069 | 1,385 | 0 | 0 | 5,328 | 5,328 | 172 |
| Yemen (Sanaa) | 2,320 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,320 | 75 |
| Zaire | 953 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 953 | 31 |
| Subtotal Other | 70,367 | 3,967 | 4,351 | 1,778 | 10,278 | 2,043 | 235 | 3,806 | 11,584 | 305 | 1,976 | 40,323 | 110,690 | 3,571 |
| **Total Imports** | **156,194** | **7,483** | **9,813** | **2,011** | **14,417** | **3,192** | **235** | **8,377** | **15,964** | **305** | **4,396** | **66,193** | **222,387** | **7,174** |
| **PAD District I** | | | | | | | | | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Algeria | 0 | 0 | 389 | 0 | 0 | 0 | 0 | 893 | 1,282 | 0 | 0 | 2,564 | 2,564 | 83 |
| Iraq | 897 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 897 | 29 |
| Saudi Arabia | 4,843 | 397 | 0 | 0 | 1,027 | 354 | 0 | 424 | 0 | 0 | 0 | 2,203 | 7,046 | 227 |
| Subtotal Arab OPEC | 5,740 | 397 | 389 | 0 | 1,027 | 354 | 0 | 1,317 | 1,282 | 0 | 0 | 4,767 | 10,507 | 339 |
| **Other OPEC** | | | | | | | | | | | | | | |
| Ecuador | 777 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 180 | 0 | 0 | 180 | 957 | 31 |
| Gabon | 556 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 556 | 18 |
| Nigeria | 9,490 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 411 | 0 | 0 | 411 | 9,901 | 319 |
| Venezuela | 3,191 | 0 | 349 | 0 | 2,856 | 522 | 0 | 3,254 | 2,507 | 0 | 623 | 10,111 | 13,302 | 429 |
| Subtotal Other OPEC | 14,014 | 0 | 349 | 0 | 2,856 | 522 | 0 | 3,254 | 3,098 | 0 | 623 | 10,702 | 24,716 | 797 |
| **Other** | | | | | | | | | | | | | | |
| Angola | 2,736 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,736 | 88 |
| Argentina | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 8 | 8 | (s) |
| Bahama Islands | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 362 | 0 | 0 | 362 | 362 | 12 |
| Belgium | 0 | 0 | 293 | 274 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 567 | 567 | 18 |
| Brazil | 0 | 0 | 0 | 0 | 2,236 | 0 | 0 | 0 | 316 | 0 | 0 | 2,552 | 2,552 | 82 |
| Cameroon | 2,362 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 333 | 0 | 0 | 333 | 2,695 | 87 |
| Canada | 2,951 | 295 | 4 | 0 | 860 | 118 | 19 | 979 | 1,490 | 5 | 475 | 4,245 | 7,196 | 232 |
| Colombia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 891 | 0 | 0 | 891 | 891 | 29 |
| Congo | 319 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 165 | 0 | 0 | 165 | 484 | 16 |
| Egypt | 1,128 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,128 | 36 |
| France | 0 | 1 | 0 | 105 | 243 | 0 | 0 | 0 | 0 | 0 | 0 | 349 | 349 | 11 |
| Germany, DR (E) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 288 | 0 | 0 | 0 | 288 | 288 | 9 |
| Germany, FD (W) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 302 | 22 | 1 | 325 | 325 | 10 |
| Greece | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 312 | 0 | 0 | 312 | 312 | 10 |
| Israel | 0 | 0 | 0 | 0 | 234 | 0 | 0 | 0 | 0 | 0 | 0 | 234 | 234 | 8 |
| Italy | 0 | 0 | 0 | 33 | 707 | 0 | 0 | 0 | 0 | 0 | 0 | 740 | 740 | 24 |
| Japan | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 9 | 9 | (s) |

See footnotes at end of table.

## Table 18. Imports of Crude Oil and Petroleum Products by Source and PAD District,[1] August 1988 (continued)
(Thousand Barrels)

| Source | Crude Oil [2] | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Products [3] | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | PAD District I (continued) | | | | | | | |
| **Other (continued)** | | | | | | | | | | | | | | |
| Mexico | 3,666 | 0 | 0 | 0 | 0 | 113 | 0 | 205 | 309 | 0 | 407 | 1,034 | 4,700 | 152 |
| Netherlands Antilles | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 226 | 342 | 0 | 0 | 568 | 568 | 18 |
| Netherlands | 0 | 0 | 0 | 0 | 1,158 | 0 | 0 | 0 | 290 | 47 | 6 | 1,501 | 1,501 | 48 |
| Norway | 1,523 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 1,623 | 52 |
| Peru | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 870 | 0 | 0 | 870 | 870 | 28 |
| Portugal | 0 | 0 | 0 | 0 | 221 | 0 | 0 | 0 | 236 | 0 | 0 | 457 | 457 | 15 |
| Puerto Rico | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 166 | 166 | 166 | 5 |
| Romania | 0 | 0 | 0 | 1,174 | 873 | 0 | 0 | 416 | 330 | 0 | 0 | 2,793 | 2,793 | 90 |
| South Africa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 12 | 12 | (s) |
| Spain | 0 | 0 | 0 | 0 | 1,294 | 236 | 0 | 219 | 798 | 0 | 141 | 2,688 | 2,688 | 87 |
| Sweden | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 65 | 0 | 0 | 65 | 65 | 2 |
| Syria | 0 | 0 | 538 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 538 | 538 | 17 |
| Trinidad and Tobago | 501 | 0 | 0 | 0 | 149 | 0 | 0 | 85 | 326 | 0 | 0 | 560 | 1,061 | 34 |
| United Kingdom | 1,048 | 0 | 0 | 0 | 712 | 0 | 0 | 0 | 844 | 0 | 0 | 1,556 | 2,604 | 84 |
| Virgin Islands | 0 | 0 | 1,750 | 169 | 393 | 117 | 216 | 1,069 | 1,385 | 0 | 0 | 5,099 | 5,099 | 164 |
| Yemen (Sanaa) | 1,743 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,743 | 56 |
| Zaire | 643 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 643 | 21 |
| Subtotal Other | 18,620 | 296 | 2,585 | 1,755 | 9,080 | 583 | 235 | 3,487 | 9,966 | 82 | 1,317 | 29,386 | 48,006 | 1,549 |
| **Total Imports** | **38,374** | **693** | **3,323** | **1,755** | **12,963** | **1,460** | **235** | **8,058** | **14,346** | **82** | **1,940** | **44,855** | **83,229** | **2,685** |
| | | | | | | | PAD District II | | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Algeria | 310 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 310 | 10 |
| Iraq | 992 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 992 | 32 |
| Saudi Arabia | 2,810 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,810 | 91 |
| Subtotal Arab OPEC | 4,112 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,112 | 133 |
| **Other OPEC** | | | | | | | | | | | | | | |
| Venezuela | 0 | 0 | 0 | 0 | 0 | 201 | 0 | 0 | 0 | 0 | 0 | 201 | 201 | 6 |
| Subtotal Other OPEC | 0 | 0 | 0 | 0 | 0 | 201 | 0 | 0 | 0 | 0 | 0 | 201 | 201 | 6 |
| **Other** | | | | | | | | | | | | | | |
| Canada | 16,738 | 2,509 | 0 | 0 | 153 | 101 | 0 | 189 | 252 | 60 | 198 | 3,462 | 20,200 | 652 |
| Mexico | 2,237 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,237 | 72 |
| South Africa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 | 4 | (s) |
| Spain | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 58 | 58 | 58 | 2 |
| United Kingdom | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | (s) |
| Subtotal Other | 18,975 | 2,512 | 0 | 0 | 153 | 101 | 0 | 189 | 252 | 60 | 260 | 3,527 | 22,502 | 726 |
| **Total Imports** | **23,087** | **2,512** | **0** | **0** | **153** | **302** | **0** | **189** | **252** | **60** | **260** | **3,727** | **26,814** | **865** |

See footnotes at end of table.

(Thousand Barrels)

| Source | Crude Oil 2 | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Products 3 | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **PAD District III** | | | | | | | | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Algeria | 2,841 | 340 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,789 | 2,129 | 4,970 | 160 |
| Iraq | 11,731 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11,731 | 378 |
| Kuwait | 4,857 | 425 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 425 | 5,282 | 170 |
| Saudi Arabia | 20,209 | 2,263 | 3,605 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5,868 | 26,077 | 841 |
| Subtotal Arab OPEC | 39,638 | 3,029 | 3,605 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,789 | 8,423 | 48,061 | 1,550 |
| **Other OPEC** | | | | | | | | | | | | | | |
| Ecuador | 337 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 337 | 11 |
| Indonesia | 1,356 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,356 | 44 |
| Nigeria | 7,362 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7,362 | 237 |
| Venezuela | 9,866 | 90 | 1,119 | 233 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 1,450 | 11,316 | 365 |
| Subtotal Other OPEC | 18,921 | 90 | 1,119 | 233 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 1,450 | 20,371 | 657 |
| **Other** | | | | | | | | | | | | | | |
| Angola | 3,907 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,907 | 126 |
| Argentina | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 53 | 0 | 53 | 53 | 2 |
| Belgium | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 3 | (s) |
| Brazil | 0 | 87 | 0 | 23 | 0 | 0 | 0 | 0 | 0 | 25 | 7 | 142 | 142 | 5 |
| Cameroon | 666 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 666 | 21 |
| Canada | 0 | 0 | 399 | 0 | 0 | 0 | 0 | 0 | 0 | 75 | 8 | 482 | 482 | 16 |
| China, People's Republic | 1,575 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,575 | 51 |
| Colombia | 1,559 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,559 | 50 |
| Congo | 1,885 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,885 | 61 |
| Egypt | 692 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 692 | 22 |
| Guatemala | 220 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 220 | 7 |
| India | 0 | 0 | 842 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 842 | 842 | 27 |
| Italy | 0 | 0 | 425 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 425 | 425 | 14 |
| Japan | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 26 | 26 | 1 |
| Mexico | 12,882 | 649 | 0 | 0 | 101 | 145 | 0 | 0 | 377 | 0 | 25 | 1,297 | 14,179 | 457 |
| Netherlands Antilles | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 59 | 59 | 59 | 2 |
| Netherlands | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 111 | 111 | 4 |
| Norway | 934 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 934 | 30 |
| Puerto Rico | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 58 | 58 | 58 | 2 |
| South Africa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | (s) |
| Trinidad and Tobago | 1,937 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,937 | 62 |
| Turkey | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 52 | 52 | 52 | 2 |
| United Kingdom | 598 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 13 | 611 | 20 |
| U.S.S.R. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 717 | 0 | 0 | 717 | 717 | 23 |
| Virgin Islands | 0 | 0 | 0 | 0 | 0 | 229 | 0 | 0 | 0 | 0 | 0 | 229 | 229 | 7 |
| Yemen (Sanaa) | 577 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 577 | 19 |
| Zaire | 310 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 310 | 10 |
| Subtotal Other | 27,742 | 736 | 1,766 | 23 | 101 | 374 | 0 | 0 | 1,094 | 153 | 263 | 4,510 | 32,252 | 1,040 |
| **Total Imports** | **86,301** | **3,855** | **6,490** | **256** | **101** | **374** | **0** | **0** | **1,094** | **153** | **2,060** | **14,383** | **100,684** | **3,248** |

See footnotes at end of table.

## Table 18. Imports of Crude Oil and Petroleum Products by Source and PAD District,[1] August 1988 (continued)
(Thousand Barrels)

| Source | Crude Oil [2] | LPG | Unfin-ished Oils | Gasoline Blending Compo-nents | Finished Motor Gasoline | Jet Fuel | Kero-sene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Prod-ucts [3] | Total Prod-ucts | Total Petro-leum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | **PAD District IV** | | | | | | | |
| **Other** | | | | | | | | | | | | | | |
| Canada | 2,121 | 252 | 0 | 0 | 72 | 0 | 0 | 64 | 1 | 0 | 56 | 445 | 2,566 | 83 |
| Subtotal Other | 2,121 | 252 | 0 | 0 | 72 | 0 | 0 | 64 | 1 | 0 | 56 | 445 | 2,566 | 83 |
| **Total Imports** | **2,121** | **252** | **0** | **0** | **72** | **0** | **0** | **64** | **1** | **0** | **56** | **445** | **2,566** | **83** |
| | | | | | | | **PAD District V** | | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Saudi Arabia | 0 | 0 | 0 | 0 | 0 | 72 | 0 | 0 | 0 | 0 | 0 | 72 | 72 | 2 |
| Subtotal Arab OPEC | 0 | 0 | 0 | 0 | 0 | 72 | 0 | 0 | 0 | 0 | 0 | 72 | 72 | 2 |
| **Other OPEC** | | | | | | | | | | | | | | |
| Indonesia | 3,402 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,402 | 110 |
| Venezuela | 0 | 0 | 0 | 0 | 256 | 0 | 0 | 0 | 0 | 0 | 0 | 256 | 256 | 8 |
| Subtotal Other OPEC | 3,402 | 0 | 0 | 0 | 256 | 0 | 0 | 0 | 0 | 0 | 0 | 256 | 3,658 | 118 |
| **Other** | | | | | | | | | | | | | | |
| Australia | 1,439 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,439 | 46 |
| Brazil | 0 | 0 | 0 | 0 | 537 | 0 | 0 | 0 | 0 | 0 | 0 | 537 | 537 | 17 |
| Canada | 136 | 171 | 0 | 0 | 151 | 4 | 0 | 66 | 78 | 10 | 26 | 506 | 642 | 21 |
| China, People's Republic | 404 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 404 | 13 |
| China, Taiwan | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 3 | (s) |
| Japan | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | (s) |
| Korea, Republic | 0 | 0 | 0 | 0 | 0 | 248 | 0 | 0 | 0 | 0 | 0 | 248 | 248 | 8 |
| Malaysia | 484 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 484 | 16 |
| Mexico | 0 | 0 | 0 | 0 | 184 | 88 | 0 | 0 | 0 | 0 | 51 | 323 | 323 | 10 |
| Singapore | 0 | 0 | 0 | 0 | 0 | 644 | 0 | 0 | 193 | 0 | 0 | 837 | 837 | 27 |
| Thailand | 446 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 446 | 14 |
| Subtotal Other | 2,909 | 172 | 0 | 0 | 872 | 984 | 0 | 66 | 271 | 10 | 80 | 2,456 | 5,365 | 173 |
| **Total Imports** | **6,311** | **172** | **0** | **0** | **1,128** | **1,056** | **0** | **66** | **271** | **10** | **80** | **2,784** | **9,095** | **293** |

[1] Crude Oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

[2] Includes crude oil imported for storage in the Strategic Petroleum Reserve.

[3] Includes aviation gasoline, aviation gasoline blending components, waxes, asphalt, lubricants, pentanes plus, naphthas less than 400 degrees F endpoint, other oils equal to or greater than 400 degrees F endpoint, petroleum coke and miscellaneous products.

[4] Beginning in January 1988, imports of crude oil and petroleum products from the Neutral Zone are shown separately. Prior to January 1988, these data were included with imports from Saudi Arabia and Kuwait.

(s) = Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

(Thousand Barrels)

| Source | Crude Oil [2] | LPG | Unfin- ished Oils | Gasoline Blending Compo- nents | Finished Motor Gasoline | Jet Fuel | Kero- sene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Prod- ucts [3] | Total Prod- ucts | Total Petro- leum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **All PAD Districts** | | | | | | | | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Algeria | 29,378 | 5,276 | 7,036 | 0 | 0 | 289 | 0 | 2,575 | 13,618 | 0 | 11,798 | 40,592 | 69,970 | 287 |
| Iraq | 73,578 | 0 | 407 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 407 | 73,985 | 303 |
| Kuwait | 15,148 | 425 | 2,637 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,062 | 18,210 | 75 |
| Neutral Zone[4] | 3,274 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,274 | 13 |
| Saudi Arabia | 206,097 | 6,823 | 24,090 | 335 | 5,601 | 1,884 | 325 | 3,176 | 0 | 0 | 660 | 42,894 | 248,991 | 1,020 |
| United Arab Emirates | 6,775 | 0 | 573 | 0 | 0 | 592 | 0 | 342 | 0 | 0 | 213 | 1,720 | 8,495 | 35 |
| Subtotal Arab OPEC | 334,250 | 12,524 | 34,743 | 335 | 5,601 | 2,765 | 325 | 6,093 | 13,618 | 0 | 12,671 | 88,675 | 422,925 | 1,733 |
| **Other OPEC** | | | | | | | | | | | | | | |
| Ecuador | 6,746 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,644 | 0 | 0 | 3,644 | 10,390 | 43 |
| Gabon | 4,990 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,990 | 20 |
| Indonesia | 41,146 | 0 | 1,176 | 0 | 0 | 0 | 0 | 0 | 968 | 0 | 214 | 2,358 | 43,504 | 178 |
| Iran | [5] 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | [5] 25 | [5] (s) |
| Nigeria | 133,261 | 0 | 603 | 0 | 0 | 0 | 0 | 256 | 1,812 | 0 | 0 | 2,671 | 135,932 | 557 |
| Venezuela | 115,221 | 1,607 | 12,752 | 628 | 10,800 | 6,291 | 0 | 18,595 | 23,524 | 3 | 4,860 | 79,060 | 194,281 | 796 |
| Subtotal Other OPEC | 301,389 | 1,607 | 14,531 | 628 | 10,800 | 6,291 | 0 | 18,851 | 29,948 | 3 | 5,074 | 87,733 | 389,122 | 1,595 |
| **Other** | | | | | | | | | | | | | | |
| Angola | 45,479 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,760 | 0 | 0 | 1,760 | 47,239 | 194 |
| Argentina | 425 | 0 | 0 | 18 | 223 | 0 | 0 | 0 | 1,006 | 297 | 17 | 1,561 | 1,986 | 8 |
| Australia | 12,438 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 642 | 0 | 131 | 773 | 13,211 | 54 |
| Bahama Islands | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 7,046 | 0 | 0 | 7,054 | 7,054 | 29 |
| Bahrain | 0 | 0 | 275 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 275 | 275 | 1 |
| Belgium | 0 | 0 | 2,474 | 482 | 1,368 | 0 | 0 | 0 | 893 | 0 | 15 | 5,232 | 5,232 | 21 |
| Benin | 956 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 956 | 4 |
| Bermuda | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 7 | (s) |
| Brazil | 0 | 548 | 15 | 23 | 16,807 | 0 | 219 | 1,065 | 4,605 | 43 | 66 | 23,391 | 23,391 | 96 |
| Brunei | 338 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 338 | 1 |
| Cameroon | 9,140 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,569 | 0 | 0 | 1,569 | 10,709 | 44 |
| Canada | 168,510 | 28,613 | 1,829 | 21 | 11,063 | 2,387 | 182 | 15,050 | 9,007 | 953 | 2,930 | 72,035 | 240,545 | 986 |
| China, People's Republic | 20,616 | 1 | 0 | 307 | 823 | 0 | 0 | 0 | 0 | 0 | 208 | 1,339 | 21,955 | 90 |
| China, Taiwan | 0 | 44 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 45 | 89 | 89 | (s) |
| Colombia | 22,150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6,541 | 0 | 0 | 6,541 | 28,691 | 118 |
| Congo | 9,190 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 436 | 0 | 0 | 436 | 9,626 | 39 |
| Egypt | 5,752 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 7 | 5,759 | 24 |
| Finland | 0 | 0 | 0 | 0 | 292 | 0 | 0 | 0 | 0 | 0 | 0 | 292 | 292 | 1 |
| France | 0 | 36 | 0 | 105 | 1,249 | 0 | 0 | 0 | 1,136 | 0 | 164 | 2,690 | 2,690 | 11 |
| Germany, DR (E) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 944 | 0 | 0 | 0 | 944 | 944 | 4 |
| Germany, FD (W) | 0 | 10 | 359 | 0 | 310 | 0 | 0 | 0 | 554 | 26 | 50 | 1,309 | 1,309 | 5 |
| Ghana | 0 | 0 | 151 | 0 | 0 | 0 | 0 | 0 | 298 | 0 | 0 | 449 | 449 | 2 |
| Greece | 0 | 0 | 239 | 0 | 2,187 | 0 | 0 | 134 | 1,632 | 0 | 0 | 4,192 | 4,192 | 17 |
| Guatemala | 640 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 640 | 3 |
| Hong Kong | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | (s) | (s) |
| Hungary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 5 | (s) |
| India | 0 | 0 | 5,098 | 0 | 0 | 0 | 0 | 0 | 0 | 1,548 | 651 | 7,297 | 7,297 | 30 |
| Ireland | 0 | 0 | 174 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 174 | 174 | 1 |
| Israel | 0 | 0 | 0 | 0 | 1,084 | 0 | 0 | 0 | 0 | 36 | 0 | 1,120 | 1,120 | 5 |
| Italy | 1,578 | 1 | 3,959 | 33 | 7,136 | 550 | 0 | 981 | 1,152 | 94 | 73 | 13,978 | 15,556 | 64 |
| Japan | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 57 | 0 | 22 | 363 | 462 | 462 | 2 |
| Korea, Republic | 0 | 8 | 0 | 0 | 0 | 258 | 0 | 0 | 0 | 0 | 111 | 377 | 377 | 2 |

See footnotes at end of table.

## Table 19. Year-to-Date Imports of Crude Oil and Petroleum Products by Source and PAD District,[1] January - August 1988 (continued)

(Thousand Barrels)

| Source | Crude Oil [2] | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Products [3] | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **All PAD Districts (continued)** | | | | | | | | | | | | | |
| **Other (continued)** | | | | | | | | | | | | | | |
| Liberia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 210 | 0 | 0 | 0 | 210 | 210 | 1 |
| Malaysia | 1,690 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,690 | 7 |
| Mauritania | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 245 | 0 | 0 | 245 | 245 | 1 |
| Mexico | 160,723 | 5,933 | 0 | 440 | 799 | 2,958 | 0 | 1,148 | 2,516 | 0 | 1,944 | 15,738 | 176,461 | 723 |
| Netherlands Antilles | 0 | 0 | 0 | 0 | 981 | 0 | 0 | 676 | 5,423 | 0 | 59 | 7,139 | 7,139 | 29 |
| Netherlands | 0 | 10 | 826 | 66 | 9,300 | 0 | 151 | 1,182 | 1,841 | 146 | 250 | 13,772 | 13,772 | 56 |
| Norway | 11,615 | 0 | 488 | 0 | 0 | 0 | 0 | 0 | 273 | 0 | 451 | 1,212 | 12,827 | 53 |
| Oman | 2,439 | 0 | 986 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 986 | 3,425 | 14 |
| Panama | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 10 | 10 | (s) |
| Peru | 1,509 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6,533 | 0 | 0 | 6,533 | 8,042 | 33 |
| Philippines | 0 | 74 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 74 | 74 | (s) |
| Portugal | 0 | 0 | 0 | 0 | 221 | 0 | 0 | 0 | 236 | 28 | 20 | 505 | 505 | 2 |
| Puerto Rico | 0 | 0 | 955 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,889 | 4,844 | 4,844 | 20 |
| Romania | 0 | 0 | 0 | 9,280 | 4,116 | 0 | 0 | 1,283 | 857 | 0 | 0 | 15,536 | 15,536 | 64 |
| Singapore | 0 | 0 | 601 | 0 | 0 | 669 | 0 | 0 | 2,225 | 0 | 0 | 3,495 | 3,495 | 14 |
| South Africa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 210 | 0 | 81 | 291 | 291 | 1 |
| Spain | 0 | 40 | 1,808 | 142 | 6,982 | 1,475 | 0 | 219 | 2,355 | 0 | 1,306 | 14,327 | 14,327 | 59 |
| Sweden | 0 | 2 | 146 | 0 | 0 | 0 | 0 | 372 | 1,146 | 0 | 250 | 1,916 | 1,916 | 8 |
| Switzerland | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | (s) |
| Syria | 616 | 0 | 538 | 0 | 0 | 0 | 0 | 0 | 194 | 0 | 0 | 732 | 1,348 | 6 |
| Thailand | 446 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 446 | 2 |
| Trinidad and Tobago | 17,264 | 0 | 0 | 0 | 287 | 633 | 115 | 519 | 4,795 | 0 | 0 | 6,349 | 23,613 | 97 |
| Tunisia | 0 | 0 | 220 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 220 | 220 | 1 |
| Turkey | 0 | 0 | 1,518 | 0 | 0 | 0 | 0 | 0 | 0 | 34 | 157 | 1,709 | 1,709 | 7 |
| United Kingdom | 66,420 | 9 | 1,537 | 0 | 6,306 | 244 | 0 | 1,238 | 2,983 | 68 | 156 | 12,541 | 78,961 | 324 |
| U.S.S.R. | 0 | 0 | 1,287 | 0 | 395 | 0 | 0 | 3,270 | 744 | 8 | 0 | 5,704 | 5,704 | 23 |
| Virgin Islands | 0 | 0 | 12,913 | 2,483 | 6,921 | 3,011 | 1,826 | 9,153 | 17,300 | 0 | 0 | 53,607 | 53,607 | 220 |
| Yemen (Sanaa) | 3,915 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,915 | 16 |
| Zaire | 7,324 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7,324 | 30 |
| Subtotal Other | 571,173 | 35,349 | 38,403 | 13,400 | 78,850 | 12,184 | 2,493 | 37,509 | 88,163 | 3,303 | 13,401 | 323,056 | 894,229 | 3,665 |
| **Total Imports** | **1,206,812** | **49,480** | **87,677** | **14,363** | **95,251** | **21,240** | **2,818** | **62,453** | **131,729** | **3,306** | **31,146** | **499,464** | **1,706,276** | **6,993** |
| | **PAD District I** | | | | | | | | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Algeria | 0 | 2,810 | 5,970 | 0 | 0 | 289 | 0 | 2,575 | 11,535 | 0 | 0 | 23,179 | 23,179 | 95 |
| Iraq | 5,723 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5,723 | 23 |
| Neutral Zone[4] | 650 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 650 | 3 |
| Saudi Arabia | 19,008 | 1,841 | 355 | 335 | 4,475 | 1,546 | 325 | 3,176 | 0 | 0 | 0 | 12,053 | 31,061 | 127 |
| United Arab Emirates | 769 | 0 | 0 | 0 | 0 | 0 | 0 | 342 | 0 | 0 | 0 | 342 | 1,111 | 5 |
| Subtotal Arab OPEC | 26,150 | 4,652 | 6,325 | 335 | 4,475 | 1,835 | 325 | 6,093 | 11,535 | 0 | 0 | 35,575 | 61,725 | 253 |
| **Other OPEC** | | | | | | | | | | | | | | |
| Ecuador | 4,555 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,644 | 0 | 0 | 3,644 | 8,199 | 34 |
| Gabon | 2,551 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,551 | 10 |
| Indonesia | 1,964 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 968 | 0 | 0 | 968 | 2,932 | 12 |
| Nigeria | 77,250 | 0 | 0 | 0 | 0 | 0 | 0 | 256 | 1,812 | 0 | 0 | 2,068 | 79,318 | 325 |
| Venezuela | 31,124 | 816 | 2,762 | 159 | 8,973 | 4,426 | 0 | 18,593 | 23,004 | 3 | 4,508 | 63,244 | 94,368 | 387 |

See footnotes at end of table.

(Thousand Barrels)

| Source | Crude Oil 2 | LPG | Unfin-ished Oils | Gasoline Blending Compo-nents | Finished Motor Gasoline | Jet Fuel | Kero-sene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Prod-ucts 3 | Total Prod-ucts | Total Petro-leum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **PAD District I (continued)** | | | | | | | | | | | | | |
| **Other OPEC** | | | | | | | | | | | | | | |
| Subtotal Other OPEC | 117,444 | 816 | 2,762 | 159 | 8,973 | 4,426 | 0 | 18,849 | 29,428 | 3 | 4,508 | 69,924 | 187,368 | 768 |
| **Other** | | | | | | | | | | | | | | |
| Angola | 22,052 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,760 | 0 | 0 | 1,760 | 23,812 | 98 |
| Argentina | 425 | 0 | 0 | 18 | 223 | 0 | 0 | 0 | 1,006 | 35 | 0 | 1,282 | 1,707 | 7 |
| Australia | 1,298 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 182 | 0 | 80 | 262 | 1,560 | 6 |
| Bahama Islands | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 6,819 | 0 | 0 | 6,827 | 6,827 | 28 |
| Belgium | 0 | 0 | 787 | 274 | 1,368 | 0 | 0 | 0 | 893 | 0 | 0 | 3,322 | 3,322 | 14 |
| Benin | 643 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 643 | 3 |
| Brazil | 0 | 0 | 15 | 0 | 15,278 | 0 | 219 | 1,065 | 4,605 | 17 | 59 | 21,258 | 21,258 | 87 |
| Cameroon | 6,131 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,569 | 0 | 0 | 1,569 | 7,700 | 32 |
| Canada | 15,947 | 3,077 | 578 | 0 | 8,662 | 1,332 | 182 | 12,014 | 7,242 | 93 | 1,411 | 34,591 | 50,538 | 207 |
| China, People's Republic | 7,795 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 98 | 98 | 7,893 | 32 |
| China, Taiwan | 0 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 30 | (s) |
| Colombia | 5,937 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6,541 | 0 | 0 | 6,541 | 12,478 | 51 |
| Congo | 1,537 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 436 | 0 | 0 | 436 | 1,973 | 8 |
| Egypt | 5,060 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 5,063 | 21 |
| Finland | 0 | 0 | 0 | 0 | 292 | 0 | 0 | 0 | 0 | 0 | 0 | 292 | 292 | 1 |
| France | 0 | 2 | 0 | 105 | 1,249 | 0 | 0 | 0 | 1,136 | 0 | 41 | 2,533 | 2,533 | 10 |
| Germany, DR (E) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 944 | 0 | 0 | 0 | 944 | 944 | 4 |
| Germany, FD (W) | 0 | 10 | 0 | 0 | 310 | 0 | 0 | 0 | 302 | 22 | 16 | 660 | 660 | 3 |
| Ghana | 0 | 0 | 133 | 0 | 0 | 0 | 0 | 0 | 298 | 0 | 0 | 431 | 431 | 2 |
| Greece | 0 | 0 | 0 | 0 | 2,187 | 0 | 0 | 134 | 1,632 | 0 | 0 | 3,953 | 3,953 | 16 |
| Hungary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 5 | (s) |
| India | 0 | 0 | 569 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 569 | 569 | 2 |
| Israel | 0 | 0 | 0 | 0 | 1,084 | 0 | 0 | 0 | 0 | 0 | 0 | 1,084 | 1,084 | 4 |
| Italy | 1,227 | 1 | 1,713 | 33 | 7,136 | 0 | 0 | 981 | 1,152 | 14 | 20 | 11,050 | 12,277 | 50 |
| Japan | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 74 | 79 | 79 | (s) |
| Korea, Republic | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | (s) |
| Liberia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 210 | 0 | 0 | 0 | 210 | 210 | 1 |
| Mauritania | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 245 | 0 | 0 | 245 | 245 | 1 |
| Mexico | 18,966 | 0 | 0 | 0 | 309 | 796 | 0 | 1,148 | 1,342 | 0 | 1,595 | 5,190 | 24,156 | 99 |
| Netherlands Antilles | 0 | 0 | 0 | 0 | 464 | 0 | 0 | 676 | 5,423 | 0 | 0 | 6,563 | 6,563 | 27 |
| Netherlands | 0 | 5 | 668 | 66 | 8,592 | 0 | 151 | 1,182 | 1,841 | 131 | 37 | 12,673 | 12,673 | 52 |
| Norway | 5,828 | 0 | 213 | 0 | 0 | 0 | 0 | 0 | 273 | 0 | 451 | 937 | 6,765 | 28 |
| Oman | 839 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 839 | 3 |
| Panama | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 10 | 10 | (s) |
| Peru | 380 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6,533 | 0 | 0 | 6,533 | 6,913 | 28 |
| Portugal | 0 | 0 | 0 | 0 | 221 | 0 | 0 | 0 | 236 | 0 | 0 | 457 | 457 | 2 |
| Puerto Rico | 0 | 0 | 852 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,235 | 4,087 | 4,087 | 17 |
| Romania | 0 | 0 | 0 | 9,280 | 4,116 | 0 | 0 | 1,283 | 857 | 0 | 0 | 15,536 | 15,536 | 64 |
| Singapore | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 402 | 0 | 0 | 402 | 402 | 2 |
| South Africa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 210 | 0 | 44 | 254 | 254 | 1 |
| Spain | 0 | 2 | 565 | 142 | 6,981 | 1,137 | 0 | 219 | 2,354 | 0 | 1,187 | 12,587 | 12,587 | 52 |
| Sweden | 0 | 1 | 146 | 0 | 0 | 0 | 0 | 372 | 1,146 | 0 | 0 | 1,665 | 1,665 | 7 |
| Switzerland | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | (s) |
| Syria | 616 | 0 | 538 | 0 | 0 | 0 | 0 | 0 | 194 | 0 | 0 | 732 | 1,348 | 6 |
| Trinidad and Tobago | 3,949 | 0 | 0 | 0 | 287 | 300 | 115 | 519 | 4,795 | 0 | 0 | 6,016 | 9,965 | 41 |
| United Kingdom | 31,987 | 3 | 4 | 0 | 6,306 | 244 | 0 | 1,238 | 2,368 | 68 | 77 | 10,308 | 42,295 | 173 |

See footnotes at end of table.

## Table 19. Year-to-Date Imports of Crude Oil and Petroleum Products by Source and PAD District,[1] January - August 1988 (continued)

(Thousand Barrels)

| Source | Crude Oil [2] | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Products [3] | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | **PAD District I (continued)** | | | | | | | |
| **Other (continued)** | | | | | | | | | | | | | | |
| U.S.S.R. | 0 | 0 | 0 | 0 | 395 | 0 | 0 | 3,270 | 27 | 8 | 0 | 3,700 | 3,700 | 15 |
| Virgin Islands | 0 | 0 | 12,497 | 2,483 | 6,921 | 2,782 | 1,110 | 9,153 | 17,300 | 0 | 0 | 52,246 | 52,246 | 214 |
| Yemen (Sanaa) | 2,713 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,713 | 11 |
| Zaire | 3,969 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,969 | 16 |
| Subtotal Other | 137,299 | 3,136 | 19,278 | 12,401 | 72,381 | 6,592 | 1,777 | 34,416 | 81,129 | 392 | 8,435 | 239,937 | 377,236 | 1,546 |
| **Total Imports** | **280,393** | **8,605** | **28,365** | **12,895** | **85,829** | **12,852** | **2,102** | **59,358** | **122,092** | **395** | **12,943** | **345,436** | **626,329** | **2,567** |
| | | | | | | | **PAD District II** | | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Algeria | 3,039 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,039 | 12 |
| Iraq | 7,910 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7,910 | 32 |
| Kuwait | 656 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 656 | 3 |
| Saudi Arabia | 34,823 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 34,823 | 143 |
| United Arab Emirates | 177 | 0 | 0 | 0 | 0 | 592 | 0 | 0 | 0 | 0 | 0 | 592 | 769 | 3 |
| Subtotal Arab OPEC | 46,605 | 0 | 0 | 0 | 0 | 592 | 0 | 0 | 0 | 0 | 0 | 592 | 47,197 | 193 |
| **Other OPEC** | | | | | | | | | | | | | | |
| Ecuador | 779 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 779 | 3 |
| Indonesia | 659 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 659 | 3 |
| Nigeria | 17,475 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17,475 | 72 |
| Venezuela | 1,813 | 0 | 634 | 0 | 0 | 1,140 | 0 | 0 | 0 | 0 | 0 | 1,774 | 3,587 | 15 |
| Subtotal Other OPEC | 20,726 | 0 | 634 | 0 | 0 | 1,140 | 0 | 0 | 0 | 0 | 0 | 1,774 | 22,500 | 92 |
| **Other** | | | | | | | | | | | | | | |
| Canada | 129,877 | 20,656 | 0 | 21 | 853 | 698 | 0 | 1,249 | 869 | 443 | 754 | 25,543 | 155,420 | 637 |
| Colombia | 472 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 472 | 2 |
| Congo | 480 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 480 | 2 |
| France | 0 | 34 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 34 | 34 | (s) |
| Italy | 0 | 0 | 0 | 0 | 0 | 132 | 0 | 0 | 0 | 0 | 0 | 132 | 132 | 1 |
| Japan | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | (s) | (s) |
| Mexico | 14,210 | 0 | 0 | 0 | 0 | 1,199 | 0 | 0 | 0 | 0 | 0 | 1,199 | 15,409 | 63 |
| Norway | 447 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 447 | 2 |
| Peru | 1,129 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,129 | 5 |
| Puerto Rico | 0 | 0 | 103 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 103 | 103 | (s) |
| South Africa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 31 | 31 | 31 | (s) |
| Spain | 0 | 0 | 0 | 0 | 0 | 251 | 0 | 0 | 0 | 0 | 119 | 370 | 370 | 2 |
| Sweden | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | (s) |
| Trinidad and Tobago | 176 | 0 | 0 | 0 | 0 | 333 | 0 | 0 | 0 | 0 | 0 | 333 | 509 | 2 |
| United Kingdom | 5,011 | 6 | 368 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 374 | 5,385 | 22 |
| Zaire | 481 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 481 | 2 |
| Subtotal Other | 152,283 | 20,698 | 471 | 21 | 853 | 2,613 | 0 | 1,249 | 869 | 443 | 904 | 28,121 | 180,404 | 739 |
| **Total Imports** | **219,614** | **20,698** | **1,105** | **21** | **853** | **4,346** | **0** | **1,249** | **869** | **443** | **904** | **30,487** | **250,101** | **1,025** |

See footnotes at end of table.

| Source | Crude Oil[2] | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Products[3] | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | **PAD District III** | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Algeria | 26,339 | 2,465 | 1,066 | 0 | 0 | 0 | 0 | 0 | 2,083 | 0 | 11,798 | 17,412 | 43,751 | 179 |
| Iraq | 59,945 | 0 | 407 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 407 | 60,352 | 247 |
| Kuwait | 14,492 | 425 | 2,637 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,062 | 17,554 | 72 |
| Neutral Zone[4] | 2,624 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,624 | 11 |
| Saudi Arabia | 152,266 | 4,981 | 23,735 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 660 | 29,376 | 181,642 | 744 |
| United Arab Emirates | 5,379 | 0 | 573 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 213 | 786 | 6,165 | 25 |
| Subtotal Arab OPEC | 261,045 | 7,872 | 28,418 | 0 | 0 | 0 | 0 | 0 | 2,083 | 0 | 12,671 | 51,044 | 312,089 | 1,279 |
| **Other OPEC** | | | | | | | | | | | | | | |
| Ecuador | 1,412 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,412 | 6 |
| Gabon | 2,439 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,439 | 10 |
| Indonesia | 13,632 | 0 | 922 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 922 | 14,554 | 60 |
| Iran | [5]25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | [5]25 | [5](s) |
| Nigeria | 38,536 | 0 | 603 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 603 | 39,139 | 160 |
| Venezuela | 82,284 | 790 | 9,356 | 469 | 1,571 | 0 | 0 | 2 | 520 | 0 | 141 | 12,849 | 95,133 | 390 |
| Subtotal Other OPEC | 138,328 | 790 | 10,881 | 469 | 1,571 | 0 | 0 | 2 | 520 | 0 | 141 | 14,374 | 152,702 | 626 |
| **Other** | | | | | | | | | | | | | | |
| Angola | 23,427 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23,427 | 96 |
| Argentina | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 262 | 17 | 279 | 279 | 1 |
| Australia | 5,384 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 51 | 51 | 5,435 | 22 |
| Bahama Islands | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 227 | 0 | 0 | 227 | 227 | 1 |
| Bahrain | 0 | 0 | 275 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 275 | 275 | 1 |
| Belgium | 0 | 0 | 1,687 | 208 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 1,910 | 1,910 | 8 |
| Benin | 313 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 313 | 1 |
| Bermuda | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 7 | (s) |
| Brazil | 0 | 548 | 0 | 23 | 747 | 0 | 0 | 0 | 0 | 26 | 7 | 1,351 | 1,351 | 6 |
| Cameroon | 3,009 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,009 | 12 |
| Canada | 3,510 | 1 | 1,251 | 0 | 0 | 0 | 0 | 600 | 701 | 349 | 251 | 3,153 | 6,663 | 27 |
| China, People's Republic | 11,110 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 110 | 110 | 11,220 | 46 |
| Colombia | 15,741 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15,741 | 65 |
| Congo | 7,173 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7,173 | 29 |
| Egypt | 692 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 | 696 | 3 |
| France | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 123 | 123 | 123 | 1 |
| Germany, FD (W) | 0 | 0 | 359 | 0 | 0 | 0 | 0 | 0 | 252 | 4 | 34 | 649 | 649 | 3 |
| Ghana | 0 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 18 | (s) |
| Greece | 0 | 0 | 239 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 239 | 239 | 1 |
| Guatemala | 640 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 640 | 3 |
| India | 0 | 0 | 4,529 | 0 | 0 | 0 | 0 | 0 | 0 | 1,548 | 651 | 6,728 | 6,728 | 28 |
| Ireland | 0 | 0 | 174 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 174 | 174 | 1 |
| Israel | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 36 | 0 | 36 | 36 | (s) |
| Italy | 351 | 0 | 2,246 | 0 | 0 | 0 | 0 | 0 | 0 | 80 | 53 | 2,379 | 2,730 | 11 |
| Japan | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 153 | 171 | 171 | 1 |
| Malaysia | 424 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 424 | 2 |
| Mexico | 127,547 | 5,933 | 0 | 440 | 101 | 674 | 0 | 0 | 1,170 | 0 | 114 | 8,431 | 135,978 | 557 |
| Netherlands Antilles | 0 | 0 | 0 | 0 | 248 | 0 | 0 | 0 | 0 | 0 | 59 | 307 | 307 | 1 |
| Netherlands | 0 | 0 | 158 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 213 | 386 | 386 | 2 |
| Norway | 5,340 | 0 | 275 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 275 | 5,615 | 23 |
| Oman | 1,600 | 0 | 986 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 986 | 2,586 | 11 |
| Portugal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 | 20 | 48 | 48 | (s) |

See footnotes at end of table.

## Table 19. Year-to-Date Imports of Crude Oil and Petroleum Products by Source and PAD District,[1] January - August 1988 (continued)

(Thousand Barrels)

| Source | Crude Oil [2] | LPG | Unfin-ished Oils | Gasoline Blending Compo-nents | Finished Motor Gasoline | Jet Fuel | Kero-sene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Prod-ucts [3] | Total Prod-ucts | Total Petro-leum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PAD District III (continued)** | | | | | | | | | | | | | | |
| **Other (continued)** | | | | | | | | | | | | | | |
| Puerto Rico | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 654 | 654 | 654 | 3 |
| South Africa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 | 4 | (s) |
| Spain | 0 | 38 | 1,243 | 0 | 1 | 86 | 0 | 0 | 1 | 0 | 0 | 1,370 | 1,370 | 6 |
| Sweden | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 250 | 250 | 250 | 1 |
| Trinidad and Tobago | 13,139 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13,139 | 54 |
| Tunisia | 0 | 0 | 220 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 220 | 220 | 1 |
| Turkey | 0 | 0 | 1,518 | 0 | 0 | 0 | 0 | 0 | 0 | 34 | 157 | 1,709 | 1,709 | 7 |
| United Kingdom | 29,422 | 0 | 1,165 | 0 | 0 | 0 | 0 | 0 | 615 | 0 | 79 | 1,859 | 31,281 | 128 |
| U.S.S.R. | 0 | 0 | 1,287 | 0 | 0 | 0 | 0 | 0 | 717 | 0 | 0 | 2,004 | 2,004 | 8 |
| Virgin Islands | 0 | 0 | 416 | 0 | 0 | 229 | 716 | 0 | 0 | 0 | 0 | 1,361 | 1,361 | 6 |
| Yemen (Sanaa) | 1,202 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,202 | 5 |
| Zaire | 2,874 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,874 | 12 |
| Subtotal Other | 252,898 | 6,520 | 18,053 | 671 | 1,097 | 989 | 716 | 600 | 3,683 | 2,400 | 3,019 | 37,748 | 290,646 | 1,191 |
| **Total Imports** | **652,271** | **15,182** | **57,352** | **1,140** | **2,668** | **989** | **716** | **602** | **6,286** | **2,400** | **15,831** | **103,166** | **755,437** | **3,096** |
| **PAD District IV** | | | | | | | | | | | | | | |
| **Other** | | | | | | | | | | | | | | |
| Canada | 15,099 | 2,957 | 0 | 0 | 424 | 0 | 0 | 557 | 1 | 1 | 233 | 4,173 | 19,272 | 79 |
| China, People's Republic | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | (s) |
| Subtotal Other | 15,099 | 2,958 | 0 | 0 | 424 | 0 | 0 | 557 | 1 | 1 | 233 | 4,174 | 19,273 | 79 |
| **Total Imports** | **15,099** | **2,958** | **0** | **0** | **424** | **0** | **0** | **557** | **1** | **1** | **233** | **4,174** | **19,273** | **79** |
| **PAD District V** | | | | | | | | | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Saudi Arabia | 0 | 0 | 0 | 0 | 1,126 | 338 | 0 | 0 | 0 | 0 | 0 | 1,464 | 1,464 | 6 |
| United Arab Emirates | 450 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 450 | 2 |
| Subtotal Arab OPEC | 450 | 0 | 0 | 0 | 1,126 | 338 | 0 | 0 | 0 | 0 | 0 | 1,464 | 1,914 | 8 |
| **Other OPEC** | | | | | | | | | | | | | | |
| Indonesia | 24,891 | 0 | 254 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 214 | 468 | 25,359 | 104 |
| Venezuela | 0 | 0 | 0 | 0 | 256 | 725 | 0 | 0 | 0 | 0 | 211 | 1,192 | 1,192 | 5 |
| Subtotal Other OPEC | 24,891 | 0 | 254 | 0 | 256 | 725 | 0 | 0 | 0 | 0 | 425 | 1,660 | 26,551 | 109 |
| **Other** | | | | | | | | | | | | | | |
| Australia | 5,756 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 460 | 0 | 0 | 460 | 6,216 | 25 |
| Brazil | 0 | 0 | 0 | 0 | 782 | 0 | 0 | 0 | 0 | 0 | 0 | 782 | 782 | 3 |
| Brunei | 338 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 338 | 1 |
| Canada | 4,077 | 1,922 | 0 | 0 | 1,124 | 356 | 0 | 630 | 194 | 67 | 281 | 4,574 | 8,651 | 35 |
| China, People's Republic | 1,711 | 0 | 0 | 307 | 823 | 0 | 0 | 0 | 0 | 0 | 0 | 1,130 | 2,841 | 12 |
| China, Taiwan | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 45 | 60 | 60 | (s) |
| Hong Kong | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | (s) | (s) |
| Italy | 0 | 0 | 0 | 0 | 0 | 418 | 0 | 0 | 0 | 0 | 0 | 418 | 418 | 2 |
| Japan | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 57 | 0 | 0 | 136 | 212 | 212 | 1 |

See footnotes at end of table.

| Source | Crude Oil 2 | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Products 3 | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **PAD District V (continued)** | | | | | | | | | | | | | |
| **Other (continued)** | | | | | | | | | | | | | | |
| Korea, Republic | 0 | 3 | 0 | 0 | 0 | 258 | 0 | 0 | 0 | 0 | 111 | 372 | 372 | 2 |
| Malaysia | 1,266 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,266 | 5 |
| Mexico | 0 | 0 | 0 | 0 | 389 | 289 | 0 | 0 | 4 | 0 | 235 | 917 | 917 | 4 |
| Netherlands Antilles | 0 | 0 | 0 | 0 | 269 | 0 | 0 | 0 | 0 | 0 | 0 | 269 | 269 | 1 |
| Netherlands | 0 | 6 | 0 | 0 | 708 | 0 | 0 | 0 | 0 | 0 | 0 | 714 | 714 | 3 |
| Philippines | 0 | 74 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 74 | 74 | (s) |
| Singapore | 0 | 0 | 601 | 0 | 0 | 669 | 0 | 0 | 1,823 | 0 | 0 | 3,093 | 3,093 | 13 |
| South Africa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | (s) |
| Switzerland | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | (s) | (s) |
| Thailand | 446 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 446 | 2 |
| Subtotal Other | 13,594 | 2,038 | 601 | 307 | 4,095 | 1,990 | 0 | 687 | 2,481 | 67 | 810 | 13,076 | 26,670 | 109 |
| **Total Imports** | **38,935** | **2,038** | **855** | **307** | **5,477** | **3,053** | **0** | **687** | **2,481** | **67** | **1,235** | **16,200** | **55,135** | **226** |

[1] Crude Oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

[2] Includes crude oil imported for storage in the Strategic Petroleum Reserve.

[3] Includes aviation gasoline, aviation gasoline blending components, waxes, asphalt, lubricants, pentanes plus, naphthas less than 400 degrees F endpoint, other oils equal to or greater than 400 degrees F endpoint, petroleum coke and miscellaneous products.

[4] Beginning in January 1988, imports of crude oil and petroleum products from the Neutral Zone are shown separately. Prior to January 1988, these data were included with imports from Saudi Arabia and Kuwait.

[5] A small amount of Iranian crude oil entered the United States (defined in this publication as the 50 States and the District of Columbia) in January 1988 from the Virgin Islands. This oil originated in Iran and was exported to the Virgin Islands prior to the signing of Executive Order 12613 on Oct. 29, 1987.

(s) = Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 20. Exports of Crude Oil and Petroleum Products by PAD District, August 1988
(Thousand Barrels)

| Commodity | Petroleum Administration for Defense Districts | | | | | | Daily Average |
|---|---|---|---|---|---|---|---|
| | I | II | III | IV | V | Total | |
| Crude Oil (including lease condensate) [1] | 0 | 150 | 0 | 0 | 4,668 | 4,818 | 155 |
| Natural Gas Liquids | 247 | 576 | 531 | 21 | 238 | 1,613 | 52 |
| Pentanes Plus | 0 | 67 | 0 | 0 | 0 | 67 | 2 |
| Liquefied Petroleum Gases | 247 | 509 | 531 | 21 | 238 | 1,546 | 50 |
| Ethane | 1 | 135 | (s) | 0 | 0 | 136 | 4 |
| Propane | 99 | 158 | 475 | 9 | 108 | 850 | 27 |
| Normal Butane | 147 | 149 | 55 | 13 | 129 | 493 | 16 |
| Isobutane | 0 | 67 | 0 | 0 | 0 | 67 | 2 |
| Finished Motor Gasoline | 10 | 8 | 436 | 0 | 27 | 479 | 15 |
| Naphtha-Type Jet Fuel | 0 | 0 | 20 | 0 | 0 | 20 | 1 |
| Kerosene-Type Jet Fuel | 15 | (s) | 24 | 0 | 401 | 440 | 14 |
| Kerosene | 8 | 1 | (s) | 0 | (s) | 10 | (s) |
| Distillate Fuel Oil | 19 | 64 | 1,031 | (s) | 1,043 | 2,158 | 70 |
| Residual Fuel Oil | 2 | 0 | 1,785 | 0 | 5,176 | 6,964 | 225 |
| Naphtha < 400 Deg. for Petro. Feed. Use | 89 | 28 | 65 | (s) | 15 | 198 | 6 |
| Other Oils > 400 Deg. for Petro. Feed. Use | 0 | 15 | 348 | 0 | 246 | 608 | 20 |
| Special Naphthas | 13 | 1 | 47 | 0 | 224 | 285 | 9 |
| Lubricants | 138 | 40 | 456 | 6 | 133 | 772 | 25 |
| Waxes | 10 | 2 | 44 | 0 | 7 | 63 | 2 |
| Petroleum Coke | 74 | 520 | 3,787 | (s) | 2,394 | 6,775 | 219 |
| Asphalt | 1 | 72 | (s) | 1 | 2 | 76 | 2 |
| Miscellaneous Products | 27 | 2 | 10 | (s) | 5 | 43 | 1 |
| Total Product Exports | 651 | 1,329 | 8,583 | 30 | 9,911 | 20,504 | 661 |
| **Total Exports** | **651** | **1,479** | **8,583** | **30** | **14,579** | **25,322** | **817** |

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[1] Crude oil exports are restricted to: 1) crude oil derived from fields under the State waters of Alaska's Cook Inlet; 2) certain domestically produced crude oil destined for Canada; and 3) shipments to U.S. territories.

(s) = Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

(Thousand Barrels)

| Commodity | Petroleum Administration for Defense Districts | | | | | | Daily Average |
|---|---|---|---|---|---|---|---|
| | I | II | III | IV | V | Total | |
| Crude Oil (including lease condensate) [1] | 0 | 2,653 | 0 | 0 | 37,836 | 40,488 | 166 |
| Natural Gas Liquids | 533 | 4,178 | 3,924 | 286 | 1,635 | 10,556 | 43 |
| Pentanes Plus | 0 | 498 | 0 | 0 | 0 | 498 | 2 |
| Liquefied Petroleum Gases | 533 | 3,680 | 3,924 | 286 | 1,635 | 10,058 | 41 |
| Ethane | 6 | 997 | 2 | 0 | (s) | 1,005 | 4 |
| Propane | 230 | 1,118 | 3,689 | 114 | 726 | 5,878 | 24 |
| Normal Butane | 298 | 1,066 | 233 | 171 | 909 | 2,677 | 11 |
| Isobutane | 0 | 498 | 0 | 0 | 0 | 498 | 2 |
| Finished Motor Gasoline | 166 | 642 | 3,633 | 1 | 908 | 5,349 | 22 |
| Naphtha-Type Jet Fuel | 8 | 0 | 32 | 1 | 80 | 122 | (s) |
| Kerosene-Type Jet Fuel | 269 | 3 | 4,680 | (s) | 1,692 | 6,644 | 27 |
| Kerosene | 70 | 126 | 13 | 1 | 2 | 211 | 1 |
| Distillate Fuel Oil | 267 | 249 | 8,332 | 1 | 8,880 | 17,730 | 73 |
| Residual Fuel Oil | 22 | 0 | 16,309 | 0 | 35,399 | 51,731 | 212 |
| Naphtha < 400 Deg. for Petro. Feed. Use | 421 | 186 | 455 | 8 | 115 | 1,186 | 5 |
| Other Oils > 400 Deg. for Petro. Feed. Use | 16 | 242 | 2,517 | 0 | 1,415 | 4,190 | 17 |
| Special Naphthas | 177 | 44 | 656 | 2 | 583 | 1,461 | 6 |
| Lubricants | 1,661 | 358 | 2,894 | 30 | 1,173 | 6,115 | 25 |
| Waxes | 46 | 103 | 190 | (s) | 64 | 403 | 2 |
| Petroleum Coke | 1,759 | 1,180 | 32,757 | 2 | 21,236 | 56,934 | 233 |
| Asphalt | 7 | 132 | 9 | 6 | 52 | 206 | 1 |
| Miscellaneous Products | 250 | 19 | 123 | 1 | 39 | 432 | 2 |
| Total Product Exports | 5,673 | 7,463 | 76,524 | 337 | 73,275 | 163,272 | 669 |
| **Total Exports** | **5,673** | **10,116** | **76,524** | **337** | **111,111** | **203,760** | **835** |

[1] Crude oil exports are restricted to: 1) crude oil derived from fields under the State waters of Alaska's Cook Inlet; 2) certain domestically produced crude oil destined for Canada, and 3) shipments to U.S. territories.

(s) = Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 22. Exports of Crude Oil and Petroleum Products by Destination, August 1988
(Thousand Barrels)

| Destination | Crude Oil 1 | LPG | Finished Motor Gasoline | Jet Fuel | Dist. Fuel Oil | Residual Fuel Oil | Special Naphthas | Lubri-cants | Waxes | Petro-leum Coke | Asphalt | Other2 | Total | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Argentina | 0 | 22 | 0 | 0 | 220 | 0 | 0 | 12 | (s) | (s) | 0 | (s) | 254 | 8 |
| Australia | 0 | 9 | 0 | 0 | 6 | 0 | (s) | 6 | (s) | 184 | (s) | 4 | 210 | 7 |
| Bahamas | 0 | 22 | 66 | 16 | 433 | 310 | 0 | 3 | 0 | 0 | (s) | (s) | 849 | 27 |
| Bahrain | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | (s) | (s) |
| Belgium & Luxembourg | 0 | (s) | 0 | 0 | 0 | 0 | 1 | 29 | 5 | 423 | 0 | 1 | 458 | 15 |
| Brazil | 0 | 0 | 0 | 0 | 263 | 0 | 0 | 33 | (s) | 55 | 0 | 2 | 353 | 11 |
| Cameroon | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 38 | 0 | 0 | 38 | 1 |
| Canada | 150 | 787 | 44 | 378 | 300 | 141 | 8 | 198 | 5 | 463 | 73 | 134 | 2,681 | 86 |
| Chile | 0 | (s) | 0 | 0 | 211 | 0 | 0 | 22 | (s) | (s) | (s) | 1 | 235 | 8 |
| China, Taiwan | 0 | (s) | 0 | 0 | 0 | 2,426 | 2 | 50 | 11 | 2 | 0 | 12 | 2,503 | 81 |
| Colombia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | (s) | (s) | (s) | 2 | 5 | (s) |
| Costa Rica | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 12 | (s) | 0 | 0 | 4 | 22 | 1 |
| Denmark | 0 | 0 | 0 | 0 | 1 | 0 | (s) | (s) | (s) | 0 | 0 | (s) | 2 | (s) |
| Dominican Republic | 0 | 19 | 0 | 0 | 1 | 0 | 0 | 3 | 0 | 0 | 0 | 1 | 24 | 1 |
| Ecuador | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 31 | (s) | 0 | 0 | 2 | 34 | 1 |
| Egypt | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 132 | 0 | 0 | 133 | 4 |
| El Salvador | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | (s) | 0 | 0 | 2 | 9 | (s) |
| Finland | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 0 | 0 | (s) | (s) | (s) |
| France | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 22 | 0 | 0 | 1 | 26 | 1 |
| French Pacific Isl | 0 | (s) | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 0 | 0 | 0 | (s) | (s) |
| Ghana | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 53 | 0 | 0 | 53 | 2 |
| Greece | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 454 | 0 | (s) | 455 | 15 |
| Guatemala | 0 | 119 | 96 | 8 | 78 | 0 | 3 | 8 | (s) | 0 | 0 | (s) | 312 | 10 |
| Guinea | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | (s) |
| Honduras | 0 | 8 | 25 | 20 | 0 | 45 | 0 | 1 | (s) | 0 | 0 | 1 | 101 | 3 |
| Hong Kong | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 0 | 0 | 0 | 1 | 5 | (s) |
| India | 0 | (s) | 0 | 0 | 0 | 0 | 1 | 8 | (s) | 0 | 0 | (s) | 10 | (s) |
| Indonesia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | (s) | 0 | (s) | (s) | 1 | (s) |
| Israel | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | (s) | 0 | 0 | 1 | 1 | (s) |
| Italy | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 2 | 1 | 1,047 | (s) | 93 | 1,144 | 37 |
| Jamaica | 0 | 15 | 53 | 0 | 109 | 181 | 0 | 8 | 1 | 0 | 0 | 1 | 368 | 12 |
| Japan | 0 | (s) | 33 | 38 | 0 | 391 | 232 | 42 | 4 | 2,331 | 0 | 172 | 3,243 | 105 |
| Jordan | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | (s) | 1 | (s) |
| Korea, Republic | 0 | 4 | 0 | 0 | 0 | 22 | 1 | 17 | (s) | 278 | 0 | 100 | 422 | 14 |
| Kuwait | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | (s) | 2 | (s) |
| Lebanon | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 121 | 0 | 0 | 121 | 4 |
| Liberia | 0 | 0 | 0 | 0 | 0 | 21 | 0 | (s) | 0 | 0 | 0 | 0 | 21 | 1 |
| Malaysia | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 47 | 51 | 2 |
| Mexico | 0 | 424 | 1 | (s) | 0 | 1,674 | 3 | 95 | 10 | 50 | (s) | 15 | 2,272 | 73 |
| Netherlands | 0 | 5 | 0 | 0 | 0 | 0 | 21 | 2 | 1 | 157 | (s) | 1 | 187 | 6 |
| Netherlands Antilles | 0 | 0 | 0 | 0 | 14 | 909 | 0 | 1 | 0 | 0 | 0 | (s) | 924 | 30 |
| New Zealand | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | (s) | (s) | 0 | 2 | 3 | (s) |
| Nigeria | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 0 | 0 | 0 | (s) | (s) |
| Norway | 0 | 1 | 0 | 0 | 0 | 0 | (s) | (s) | 0 | 31 | 0 | 0 | 32 | 1 |
| Pacific Trust Terr. | 0 | 3 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 0 | 0 | 0 | 3 | (s) |
| Panama | 0 | 0 | 160 | 0 | 72 | 0 | (s) | 3 | (s) | 0 | (s) | (s) | 235 | 8 |
| Peru | 0 | 0 | 0 | 0 | 261 | 0 | (s) | 3 | 0 | (s) | 0 | (s) | 264 | 9 |
| Philippines | 0 | 29 | 0 | 0 | 0 | 0 | 1 | (s) | (s) | 0 | 0 | 114 | 145 | 5 |
| Puerto Rico | 779 | 1 | 0 | 0 | (s) | 0 | (s) | 27 | 1 | 0 | (s) | 37 | 846 | 27 |
| Rep. of South Africa | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | (s) | 0 | 0 | (s) | 2 | (s) |
| Saudi Arabia | 0 | 7 | 0 | 0 | 0 | 0 | 1 | 3 | 0 | 0 | (s) | 6 | 15 | (s) |
| Singapore | 0 | (s) | 0 | 0 | 0 | 289 | 1 | 10 | (s) | 28 | 0 | 2 | 330 | 11 |

See footnotes at end of table.

(Thousand Barrels)

| Destination | Crude Oil 1 | LPG | Finished Motor Gasoline | Jet Fuel | Dist. Fuel Oil | Residual Fuel Oil | Special Naphthas | Lubri-cants | Waxes | Petro-leum Coke | Asphalt | Other2 | Total | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Spain | 0 | 0 | 0 | 0 | 0 | 553 | 0 | 10 | (s) | 791 | 0 | 1 | 1,355 | 44 |
| Surinam | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 8 | 0 | (s) | 9 | (s) |
| Sweden | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | (s) | (s) | 1 | (s) |
| Switzerland | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | (s) | 0 | 2 | (s) |
| Thailand | 0 | 1 | 0 | 0 | 0 | 0 | (s) | 4 | (s) | 0 | (s) | 4 | 9 | (s) |
| Trinidad and Tobago | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | (s) | 0 | (s) | 1 | (s) |
| Turkey | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | (s) | (s) |
| United Arab Emirates | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | (s) | (s) | (s) | 8 | (s) |
| United Kingdom | 0 | 39 | (s) | 0 | 3 | 0 | (s) | 4 | 1 | 2 | 1 | 103 | 153 | 5 |
| U.S.S.R. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 29 | 0 | 0 | 0 | 0 | 29 | 1 |
| Uruguay | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | (s) | 1 | (s) |
| Venezuela | 0 | 2 | 0 | 0 | 0 | 0 | 4 | 1 | (s) | 0 | 0 | 2 | 10 | (s) |
| Virgin Islands | 3,889 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 3,890 | 125 |
| West Germany | 0 | 1 | 0 | 0 | 0 | 0 | (s) | 19 | 1 | 91 | 1 | 4 | 117 | 4 |
| Yugoslavia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 6 | (s) |
| Other | 0 | 25 | 0 | 0 | 186 | 0 | 1 | 36 | (s) | 31 | (s) | 51 | 330 | 11 |
| **Total** | **4,818** | **1,546** | **479** | **460** | **2,158** | **6,964** | **285** | **772** | **63** | **6,775** | **76** | **926** | **25,322** | **817** |

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[1] Crude oil exports are restricted to: 1) crude oil derived from fields under the State waters of Alaska's Cook Inlet; 2) certain domestically produced crude oil destined for Canada; and 3) shipments to U.S. territories.

[2] Includes pentanes plus, kerosene, naphtha less than 400 degrees F endpoint, other oils equal to or greater than 400 degrees F endpoint and miscellaneous products.

(s) = Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 23. Year-to-Date Exports of Crude Oil and Petroleum Products by Destination, January - August 1988
(Thousand Barrels)

| Destination | Crude Oil 1 | LPG | Finished Motor Gasoline | Jet Fuel | Dist. Fuel Oil | Residual Fuel Oil | Special Naphthas | Lubri-cants | Waxes | Petro-leum Coke | Asphalt | Other2 | Total | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Argentina | 0 | 41 | 0 | 0 | 220 | 256 | 9 | 40 | 1 | 3 | (s) | 116 | 686 | 3 |
| Australia | 0 | 14 | 0 | 0 | 229 | 2,033 | 43 | 62 | 3 | 2,031 | 1 | 32 | 4,447 | 18 |
| Bahamas | 0 | 94 | 471 | 261 | 1,735 | 3,335 | 0 | 27 | (s) | 0 | (s) | 1 | 5,925 | 24 |
| Bahrain | 0 | 1 | 0 | 0 | (s) | 0 | (s) | (s) | 0 | 252 | 0 | 2 | 255 | 1 |
| Belgium & Luxembourg | 0 | 20 | 0 | 0 | 0 | 0 | 62 | 185 | 10 | 5,401 | (s) | 6 | 5,684 | 23 |
| Brazil | 0 | 52 | 42 | 0 | 263 | 0 | 25 | 124 | (s) | 237 | (s) | 5 | 747 | 3 |
| Cameroon | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 113 | 0 | 0 | 113 | (s) |
| Canada | 2,663 | 4,353 | 1,102 | 1,991 | 2,460 | 2,497 | 96 | 1,086 | 123 | 3,011 | 178 | 1,251 | 20,811 | 85 |
| Chile | 0 | 3 | 0 | 0 | 211 | 0 | 8 | 139 | 1 | (s) | (s) | 8 | 370 | 2 |
| China, Taiwan | 951 | 10 | 1 | 0 | 587 | 8,325 | 3 | 365 | 17 | 174 | (s) | 73 | 10,506 | 43 |
| Colombia | 0 | (s) | 126 | 0 | 0 | 0 | 8 | 47 | (s) | 1 | (s) | 16 | 198 | 1 |
| Costa Rica | 0 | (s) | 10 | 0 | (s) | 0 | 20 | 82 | (s) | 20 | (s) | 23 | 156 | 1 |
| Denmark | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 2 | (s) | 657 | 1 | 9 | 671 | 3 |
| Dominican Republic | 0 | 47 | 4 | 0 | 57 | 0 | 3 | 23 | (s) | (s) | 0 | 6 | 141 | 1 |
| Ecuador | 0 | (s) | 51 | 10 | (s) | 0 | 3 | 100 | 1 | 0 | (s) | 8 | 173 | 1 |
| Egypt | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 268 | (s) | 1 | 277 | 1 |
| El Salvador | 0 | 0 | 8 | 0 | 0 | 0 | 3 | 27 | (s) | (s) | 0 | 4 | 43 | (s) |
| Finland | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 174 | 0 | 1 | 185 | 1 |
| France | 0 | 3 | (s) | 0 | 0 | 107 | 1 | 24 | 46 | 1,642 | (s) | 675 | 2,497 | 10 |
| French Pacific Isl | 0 | 1 | 0 | 0 | 392 | 920 | (s) | 3 | 0 | 0 | 0 | 0 | 1,316 | 5 |
| Ghana | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 1 | 0 | 278 | (s) | 1 | 280 | 1 |
| Greece | 0 | 6 | 0 | 0 | 0 | 0 | 2 | 7 | (s) | 1,135 | 0 | (s) | 1,151 | 5 |
| Guatemala | 0 | 703 | 651 | 45 | 1,075 | 0 | 11 | 79 | (s) | (s) | (s) | 11 | 2,575 | 11 |
| Guinea | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | (s) | 6 | (s) |
| Honduras | 0 | 53 | 25 | 20 | 70 | 45 | 4 | 28 | 3 | 0 | 0 | 8 | 255 | 1 |
| Hong Kong | 0 | 4 | 0 | 0 | 0 | 0 | 1 | 21 | 1 | 0 | (s) | 3 | 30 | (s) |
| India | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 65 | 1 | (s) | (s) | 30 | 100 | (s) |
| Indonesia | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 23 | (s) | 97 | (s) | 1 | 126 | 1 |
| Iran | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Israel | 0 | 1 | 39 | 448 | 0 | 0 | 11 | 20 | (s) | 134 | 0 | 7 | 660 | 3 |
| Italy | 0 | 111 | 3 | 0 | 0 | 0 | 26 | 36 | 4 | 7,239 | (s) | 666 | 8,084 | 33 |
| Ivory Coast | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | (s) | 0 | (s) | (s) | 25 | (s) |
| Jamaica | 0 | 169 | 98 | 0 | 378 | 1,848 | 1 | 28 | 1 | (s) | 0 | 7 | 2,531 | 10 |
| Japan | 0 | 21 | 2,072 | 3,266 | 5,734 | 4,825 | 718 | 386 | 25 | 14,647 | (s) | 513 | 32,208 | 132 |
| Jordan | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | (s) | 10 | (s) |
| Korea, Republic | 0 | 54 | 3 | 0 | 242 | 3,038 | 44 | 279 | 4 | 826 | (s) | 710 | 5,199 | 21 |
| Kuwait | 0 | 1 | 0 | 0 | 0 | 0 | (s) | 9 | 0 | 0 | 0 | 1 | 12 | (s) |
| Lebanon | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 5 | (s) | 121 | 0 | (s) | 126 | 1 |
| Liberia | 0 | 0 | 0 | 0 | 0 | 21 | 0 | 1 | 0 | 0 | (s) | (s) | 21 | (s) |
| Malaysia | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 13 | 4 | 0 | (s) | 53 | 70 | (s) |
| Mexico | 0 | 3,682 | 5 | 17 | 1 | 10,073 | 39 | 735 | 104 | 598 | 1 | 120 | 15,374 | 63 |
| Netherlands | 0 | 43 | 19 | 0 | 0 | 0 | 113 | 73 | 5 | 6,025 | 1 | 328 | 6,607 | 27 |
| Netherlands Antilles | 0 | (s) | 9 | 2 | 79 | 4,521 | 1 | 13 | 0 | 0 | 0 | 3 | 4,629 | 19 |
| New Zealand | 0 | (s) | 0 | 0 | 0 | 0 | 6 | 10 | 1 | 396 | 1 | 9 | 422 | 2 |
| Nigeria | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 90 | 1 | 0 | (s) | (s) | 91 | (s) |
| Norway | 0 | 6 | 0 | 0 | (s) | 0 | (s) | 5 | (s) | 794 | (s) | 1 | 805 | 3 |
| Pacific Trust Terr. | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | (s) | 6 | (s) |
| Panama | 0 | 20 | 363 | 0 | 828 | 1,033 | 9 | 224 | (s) | 0 | (s) | 7 | 2,485 | 10 |
| Peru | 0 | 22 | 25 | 687 | 1,702 | 0 | 1 | 42 | (s) | (s) | (s) | 4 | 2,484 | 10 |
| Philippines | 0 | 30 | 0 | 0 | 0 | 0 | 9 | 40 | 1 | 0 | (s) | 123 | 202 | 1 |
| Puerto Rico | 4,092 | 75 | 8 | 0 | 308 | 87 | 10 | 264 | 9 | 11 | (s) | 108 | 4,973 | 20 |
| Rep. of South Africa | 0 | 2 | 0 | 0 | 0 | 0 | (s) | 6 | 1 | 259 | (s) | 14 | 282 | 1 |
| Saudi Arabia | 0 | 84 | 0 | 0 | 0 | 0 | 1 | 49 | (s) | 2 | (s) | 26 | 162 | 1 |

See footnotes at end of table.

## Table 23. Year-to-Date Exports of Crude Oil and Petroleum Products by Destination, January - August 1988 (Continued)
(Thousand Barrels)

| Destination | Crude Oil [1] | LPG | Finished Motor Gasoline | Jet Fuel | Dist. Fuel Oil | Residual Fuel Oil | Special Naphthas | Lubricants | Waxes | Petroleum Coke | Asphalt | Other[2] | Total | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Singapore | 0 | 4 | 0 | 0 | 326 | 4,513 | 11 | 43 | (s) | 30 | (s) | 154 | 5,081 | 21 |
| Spain | 0 | (s) | 0 | 0 | 202 | 3,103 | (s) | 34 | 19 | 5,340 | (s) | 442 | 9,142 | 37 |
| Surinam | 0 | 53 | 0 | 0 | 0 | 0 | (s) | 7 | 0 | 8 | 0 | 1 | 69 | (s) |
| Sweden | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 9 | 1 | 307 | 1 | 3 | 322 | 1 |
| Switzerland | 0 | (s) | 0 | 0 | 0 | 0 | 1 | 6 | (s) | 0 | (s) | 2 | 10 | (s) |
| Thailand | 0 | 2 | 0 | 0 | 0 | 0 | 5 | 25 | 1 | 0 | (s) | 298 | 332 | 1 |
| Trinidad and Tobago | 0 | 7 | 0 | 0 | 80 | 0 | 108 | 2 | (s) | (s) | 0 | 3 | 199 | 1 |
| Turkey | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 26 | (s) | 1,042 | 0 | 2 | 1,070 | 4 |
| United Arab Emirates | 0 | (s) | 0 | 0 | 0 | 5 | (s) | 63 | 0 | 132 | (s) | 8 | 209 | 1 |
| United Kingdom | 0 | 44 | 55 | 0 | 4 | 204 | 1 | 42 | 4 | 1,065 | 6 | 345 | 1,770 | 7 |
| U.S.S.R. | 0 | 0 | 0 | 0 | 0 | 25 | 0 | 553 | 0 | 287 | 0 | 59 | 925 | 4 |
| Uruguay | 0 | (s) | 0 | 0 | 0 | 182 | 0 | 7 | (s) | 0 | 0 | 1 | 190 | 1 |
| Venezuela | 0 | 13 | 0 | 5 | (s) | 0 | 12 | 22 | 2 | 730 | (s) | 22 | 806 | 3 |
| Virgin Islands | 32,782 | 4 | 7 | 0 | 0 | 0 | 0 | 17 | 0 | 0 | 0 | 7 | 32,817 | 134 |
| West Germany | 0 | 15 | 2 | 0 | (s) | 0 | 16 | 153 | 7 | 476 | 8 | 52 | 730 | 3 |
| Yugoslavia | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 1 | 0 | 269 | 1 | 2 | 272 | 1 |
| Other | 0 | 182 | 153 | 13 | 545 | 735 | 7 | 159 | 1 | 702 | 2 | 124 | 2,624 | 11 |
| **Total** | **40,488** | **10,058** | **5,349** | **6,766** | **17,730** | **51,731** | **1,461** | **6,115** | **403** | **56,934** | **206** | **6,517** | **203,760** | **835** |

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[1] Crude oil exports are restricted to: 1) crude oil derived from fields under the State waters of Alaska's Cook Inlet; 2) certain domestically produced crude oil destined for Canada; and 3) shipments to U.S. territories.

[2] Includes pentanes plus, kerosene, naphtha less than 400 degrees F endpoint, other oils equal to or greater than 400 degrees F endpoint and miscellaneous products.

(s) = Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 24. Stocks of Crude Oil and Petroleum Products by PAD District, August 31, 1988
(Thousand Barrels)

| Commodity | PAD District I | | | PAD District II | | | | PAD District III | | | | | | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | East Coast | Appalachian No.1 | Total | Ind., Ill., Ky. * | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast | |
| **Crude Oil (incl. lease condensate)** | | | | | | | | | | | | | | | | |
| Refinery | -- | -- | 14,758 | -- | -- | -- | 12,238 | -- | -- | -- | -- | -- | 48,398 | 1,704 | 24,677 | 101,775 |
| Tank Farms and Pipelines | -- | -- | 1,351 | -- | -- | -- | 54,970 | -- | -- | -- | -- | -- | 96,769 | 9,048 | 32,419 | 194,557 |
| Leases | -- | -- | 35 | -- | -- | -- | 1,415 | -- | -- | -- | -- | -- | 16,358 | 1,129 | 1,814 | 20,751 |
| Strategic Petroleum Reserve[1] | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | -- | -- | 552,145 | 0 | 0 | 552,145 |
| Alaskan In-Transit | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | -- | -- | 0 | 0 | 16,087 | 16,087 |
| Total | -- | -- | 16,144 | -- | -- | -- | 68,623 | -- | -- | -- | -- | -- | 713,670 | 11,881 | 74,997 | 885,315 |
| **Total Stocks, All Oils (excl. Crude Oil)** | | | | | | | | | | | | | | | | |
| Refinery | 43,244 | 3,005 | 46,249 | 39,894 | 7,633 | 15,581 | 63,108 | 10,748 | 80,670 | 47,929 | 5,708 | 1,096 | 146,151 | 10,760 | 66,222 | 332,490 |
| Bulk Terminal | -- | -- | 99,730 | -- | -- | -- | 74,307 | -- | -- | -- | -- | -- | 78,488 | 2,745 | 24,001 | 279,271 |
| Pipeline | -- | -- | 26,022 | -- | -- | -- | 34,960 | -- | -- | -- | -- | -- | 40,434 | 2,413 | 4,387 | 108,216 |
| Natural Gas Processing Plant | 165 | 29 | 194 | 337 | 73 | 2,809 | 3,219 | 1,300 | 7,755 | 2,371 | 165 | 122 | 11,713 | 172 | 147 | 15,445 |
| Total | -- | -- | 172,195 | -- | -- | -- | 175,594 | -- | -- | -- | -- | -- | 276,786 | 16,090 | 94,757 | 735,422 |
| **Pentanes Plus** | | | | | | | | | | | | | | | | |
| Refinery | 17 | 0 | 17 | 205 | 62 | 180 | 447 | 300 | 193 | 149 | 11 | 28 | 681 | 1 | 65 | 1,211 |
| Bulk Terminal | -- | -- | 29 | -- | -- | -- | 1,860 | -- | -- | -- | -- | -- | 2,709 | 0 | 40 | 4,638 |
| Pipeline | -- | -- | 0 | -- | -- | -- | 637 | -- | -- | -- | -- | -- | 992 | 81 | 0 | 1,710 |
| Natural Gas Processing Plant | 3 | 5 | 8 | 26 | 23 | 429 | 478 | 391 | 760 | 519 | 46 | 33 | 1,749 | 55 | 21 | 2,311 |
| Total | -- | -- | 54 | -- | -- | -- | 3,422 | -- | -- | -- | -- | -- | 6,131 | 137 | 126 | 9,870 |
| **Liquefied Petroleum Gases** | | | | | | | | | | | | | | | | |
| Refinery | 1,226 | 10 | 1,236 | 2,639 | 155 | 518 | 3,312 | 2,524 | 2,285 | 3,500 | 24 | 32 | 8,365 | 406 | 765 | 14,084 |
| Bulk Terminal | -- | -- | 2,259 | -- | -- | -- | 23,522 | -- | -- | -- | -- | -- | 50,355 | 90 | 2,306 | 78,532 |
| Pipeline | -- | -- | 1,974 | -- | -- | -- | 6,249 | -- | -- | -- | -- | -- | 6,241 | 427 | 0 | 14,891 |
| Natural Gas Processing Plant | 162 | 24 | 186 | 311 | 50 | 2,380 | 2,741 | 885 | 6,991 | 1,850 | 119 | 89 | 9,934 | 117 | 126 | 13,104 |
| Total | -- | -- | 5,655 | -- | -- | -- | 35,824 | -- | -- | -- | -- | -- | 74,895 | 1,040 | 3,197 | 120,611 |
| **Ethane** | | | | | | | | | | | | | | | | |
| Refinery | 21 | 0 | 21 | 1 | 0 | 0 | 1 | 38 | 163 | 0 | 0 | 0 | 201 | 0 | 0 | 223 |
| Bulk Terminal | -- | -- | 2 | -- | -- | -- | 2,158 | -- | -- | -- | -- | -- | 9,611 | 0 | 0 | 11,771 |
| Pipeline | -- | -- | 0 | -- | -- | -- | 1,470 | -- | -- | -- | -- | -- | 2,426 | 123 | 0 | 4,019 |
| Natural Gas Processing Plant | 0 | 0 | 0 | 17 | 0 | 259 | 276 | 84 | 1,714 | 127 | 9 | 16 | 1,950 | 3 | 0 | 2,229 |
| Total | -- | -- | 23 | -- | -- | -- | 3,905 | -- | -- | -- | -- | -- | 14,188 | 126 | 0 | 18,242 |

See footnotes at end of table.

(Thousand Barrels)

| Commodity | PAD District I |  |  | PAD District II |  |  |  | PAD District III |  |  |  |  |  | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | East Coast | Appalachian No.1 | Total | Ind., Ill., Ky. * | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast |  |
| **Propane** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 955 | 3 | 958 | 1,683 | 21 | 161 | 1,865 | 1,489 | 1,252 | 1,309 | 6 | 4 | 4,060 | 164 | 112 | 7,159 |
| Bulk Terminal | -- | -- | 1,708 | -- | -- | -- | 15,939 | -- | -- | -- | -- | -- | 25,490 | 89 | 522 | 43,748 |
| Pipeline | -- | -- | 1,874 | -- | -- | -- | 3,023 | -- | -- | -- | -- | -- | 2,574 | 165 | 0 | 7,636 |
| Natural Gas Processing Plant | 108 | 18 | 126 | 192 | 29 | 1,124 | 1,345 | 498 | 1,801 | 201 | 48 | 49 | 2,597 | 71 | 112 | 4,251 |
| Total | -- | -- | 4,666 | -- | -- | -- | 22,172 | -- | -- | -- | -- | -- | 34,721 | 489 | 746 | 62,794 |
| **Normal Butane** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 206 | 7 | 213 | 665 | 55 | 262 | 982 | 757 | 360 | 1,697 | 4 | 17 | 2,835 | 169 | 575 | 4,774 |
| Bulk Terminal | -- | -- | 547 | -- | -- | -- | 4,397 | -- | -- | -- | -- | -- | 10,958 | 1 | 1,597 | 17,500 |
| Pipeline | -- | -- | 97 | -- | -- | -- | 1,232 | -- | -- | -- | -- | -- | 736 | 90 | 0 | 2,155 |
| Natural Gas Processing Plant | 52 | 1 | 53 | 84 | 21 | 783 | 888 | 256 | 2,352 | 544 | 50 | 17 | 3,219 | 38 | 10 | 4,208 |
| Total | -- | -- | 910 | -- | -- | -- | 7,499 | -- | -- | -- | -- | -- | 17,748 | 298 | 2,182 | 28,637 |
| **Isobutane** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 44 | 0 | 44 | 290 | 79 | 95 | 464 | 240 | 510 | 494 | 14 | 11 | 1,269 | 73 | 78 | 1,928 |
| Bulk Terminal | -- | -- | 2 | -- | -- | -- | 1,028 | -- | -- | -- | -- | -- | 4,296 | 0 | 187 | 5,513 |
| Pipeline | -- | -- | 3 | -- | -- | -- | 524 | -- | -- | -- | -- | -- | 505 | 49 | 0 | 1,081 |
| Natural Gas Processing Plant | 2 | 5 | 7 | 18 | 0 | 214 | 232 | 47 | 1,124 | 978 | 12 | 7 | 2,168 | 5 | 4 | 2,416 |
| Total | -- | -- | 56 | -- | -- | -- | 2,248 | -- | -- | -- | -- | -- | 8,238 | 127 | 269 | 10,938 |
| **Other Hydrocarbons and Alcohol** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 8 | 0 | 8 | 140 | 2 | 47 | 189 | 0 | 66 | 91 | 0 | 5 | 162 | 28 | 7 | 394 |
| Total | -- | -- | 8 | -- | -- | -- | 189 | -- | -- | -- | -- | -- | 162 | 28 | 7 | 394 |
| **Unfinished Oils** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Naphthas and Lighter | 4,008 | 223 | 4,231 | 3,255 | 153 | 1,210 | 4,618 | 804 | 8,667 | 4,877 | 183 | 31 | 14,562 | 534 | 4,677 | 28,622 |
| Kerosene and Light Gas Oils | 2,234 | 145 | 2,379 | 2,037 | 117 | 215 | 2,369 | 465 | 6,688 | 2,525 | 60 | 2 | 9,740 | 333 | 4,066 | 18,887 |
| Heavy Gas Oils | 5,136 | 308 | 5,444 | 2,847 | 309 | 1,608 | 4,764 | 594 | 9,261 | 6,842 | 456 | 159 | 17,312 | 735 | 14,460 | 42,715 |
| Residuum | 996 | 145 | 1,141 | 2,487 | 2 | 1,214 | 3,703 | 697 | 5,799 | 3,770 | 54 | 0 | 10,320 | 306 | 5,384 | 20,854 |
| Total | 12,374 | 821 | 13,195 | 10,626 | 581 | 4,247 | 15,454 | 2,560 | 30,415 | 18,014 | 753 | 192 | 51,934 | 1,908 | 28,587 | 111,078 |

See footnotes at end of table.

## Table 24. Stocks of Crude Oil and Petroleum Products by PAD District, August 31, 1988 (continued)
(Thousand Barrels)

| Commodity | PAD District I | | | PAD District II | | | | PAD District III | | | | | | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | East Coast | Appalachian No.1 | Total | Ind., Ill., Ky. * | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast | |
| **Motor Gasoline Blending Components** | | | | | | | | | | | | | | | | |
| Refinery | 4,198 | 77 | 4,275 | 5,504 | 427 | 1,880 | 7,811 | 1,287 | 7,511 | 5,118 | 153 | 197 | 14,266 | 1,595 | 6,927 | 34,874 |
| Bulk Terminal | -- | -- | 213 | -- | -- | -- | 282 | -- | -- | -- | -- | -- | 775 | 18 | 22 | 1,310 |
| Pipeline | -- | -- | 0 | -- | -- | -- | 57 | -- | -- | -- | -- | -- | 7 | 0 | 0 | 64 |
| Total | -- | -- | 4,488 | -- | -- | -- | 8,150 | -- | -- | -- | -- | -- | 15,048 | 1,613 | 6,949 | 36,248 |
| **Aviation Gasoline Blending Components** | | | | | | | | | | | | | | | | |
| Refinery | 0 | 0 | 0 | 28 | 0 | 2 | 30 | 0 | 0 | 56 | 0 | 0 | 56 | 0 | 27 | 113 |
| Total | -- | -- | 0 | -- | -- | -- | 30 | -- | -- | -- | -- | -- | 56 | 0 | 27 | 113 |
| **Total Finished Motor Gasoline** | | | | | | | | | | | | | | | | |
| Refinery | 8,050 | 465 | 8,515 | 5,976 | 1,062 | 2,849 | 9,887 | 1,533 | 11,775 | 4,988 | 575 | 153 | 19,024 | 1,526 | 8,702 | 47,654 |
| Bulk Terminal | -- | -- | 34,804 | -- | -- | -- | 25,811 | -- | -- | -- | -- | -- | 9,728 | 1,621 | 10,317 | 82,281 |
| Pipeline | -- | -- | 13,150 | -- | -- | -- | 16,767 | -- | -- | -- | -- | -- | 19,363 | 1,087 | 2,052 | 52,419 |
| Total | -- | -- | 56,469 | -- | -- | -- | 52,465 | -- | -- | -- | -- | -- | 48,115 | 4,234 | 21,071 | 182,354 |
| **Finished Leaded Motor Gasoline** | | | | | | | | | | | | | | | | |
| Refinery | 756 | 136 | 892 | 1,516 | 247 | 920 | 2,683 | 539 | 2,236 | 1,290 | 113 | 73 | 4,251 | 671 | 2,572 | 11,069 |
| Bulk Terminal | -- | -- | 8,662 | -- | -- | -- | 7,838 | -- | -- | -- | -- | -- | 3,118 | 659 | 3,314 | 23,591 |
| Pipeline | -- | -- | 1,960 | -- | -- | -- | 3,936 | -- | -- | -- | -- | -- | 3,073 | 574 | 307 | 9,850 |
| Total | -- | -- | 11,514 | -- | -- | -- | 14,457 | -- | -- | -- | -- | -- | 10,442 | 1,904 | 6,193 | 44,510 |
| **Finished Unleaded Motor Gasoline** | | | | | | | | | | | | | | | | |
| Refinery | 7,294 | 329 | 7,623 | 4,460 | 815 | 1,929 | 7,204 | 994 | 9,539 | 3,698 | 462 | 80 | 14,773 | 855 | 6,130 | 36,585 |
| Bulk Terminal | -- | -- | 26,142 | -- | -- | -- | 17,973 | -- | -- | -- | -- | -- | 6,610 | 962 | 7,003 | 58,690 |
| Pipeline | -- | -- | 11,190 | -- | -- | -- | 12,831 | -- | -- | -- | -- | -- | 16,290 | 513 | 1,745 | 42,569 |
| Total | -- | -- | 44,955 | -- | -- | -- | 38,008 | -- | -- | -- | -- | -- | 37,673 | 2,330 | 14,878 | 137,844 |
| **Finished Aviation Gasoline** | | | | | | | | | | | | | | | | |
| Refinery | 89 | 0 | 89 | 125 | 6 | 17 | 148 | 77 | 272 | 130 | 0 | 0 | 479 | 31 | 185 | 932 |
| Bulk Terminal | -- | -- | 258 | -- | -- | -- | 286 | -- | -- | -- | -- | -- | 63 | 14 | 258 | 879 |
| Pipeline | -- | -- | 0 | -- | -- | -- | 79 | -- | -- | -- | -- | -- | 16 | 0 | 0 | 95 |
| Total | -- | -- | 347 | -- | -- | -- | 513 | -- | -- | -- | -- | -- | 558 | 45 | 443 | 1,906 |

See footnotes at end of table.

(Thousand Barrels)

| Commodity | PAD District I | | | PAD District II | | | | PAD District III | | | | | | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | East Coast | Appala-chian No.1 | Total | Ind., Ill., Ky. * | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast | |
| **Naphtha-Type Jet Fuel** | | | | | | | | | | | | | | | | |
| Refinery | 361 | 0 | 361 | 264 | 3 | 130 | 397 | 241 | 707 | 764 | 121 | 157 | 1,990 | 268 | 758 | 3,774 |
| Bulk Terminal | – | – | 881 | – | – | – | 288 | – | – | – | – | – | 122 | 14 | 544 | 1,849 |
| Pipeline | – | – | 126 | – | – | – | 143 | – | – | – | – | – | 455 | 87 | 427 | 1,238 |
| Total | – | – | 1,368 | – | – | – | 828 | – | – | – | – | – | 2,567 | 369 | 1,729 | 6,861 |
| **Kerosene-Type Jet Fuel** | | | | | | | | | | | | | | | | |
| Refinery | 1,806 | 16 | 1,822 | 1,194 | 261 | 490 | 1,945 | 462 | 3,694 | 3,142 | 102 | 15 | 7,415 | 519 | 3,833 | 15,534 |
| Bulk Terminal | – | – | 4,070 | – | – | – | 2,787 | – | – | – | – | – | 2,058 | 92 | 2,679 | 11,686 |
| Pipeline | – | – | 3,622 | – | – | – | 2,907 | – | – | – | – | – | 5,328 | 201 | 693 | 12,751 |
| Total | – | – | 9,514 | – | – | – | 7,639 | – | – | – | – | – | 14,801 | 812 | 7,205 | 39,971 |
| **Kerosene** | | | | | | | | | | | | | | | | |
| Refinery | 272 | 101 | 373 | 434 | 73 | 268 | 775 | 77 | 731 | 423 | 78 | 0 | 1,309 | 6 | 184 | 2,647 |
| Bulk Terminal | – | – | 2,432 | – | – | – | 857 | – | – | – | – | – | 624 | 28 | 47 | 3,988 |
| Pipeline | – | – | 113 | – | – | – | 99 | – | – | – | – | – | 280 | 0 | 4 | 496 |
| Total | – | – | 2,918 | – | – | – | 1,731 | – | – | – | – | – | 2,213 | 34 | 235 | 7,131 |
| **Distillate Fuel Oils** | | | | | | | | | | | | | | | | |
| Refinery | 8,908 | 459 | 9,367 | 4,716 | 1,844 | 3,030 | 9,590 | 795 | 9,521 | 3,658 | 1,619 | 96 | 15,689 | 1,625 | 5,394 | 41,665 |
| Bulk Terminal | – | – | 35,677 | – | – | – | 13,440 | – | – | – | – | – | 5,120 | 834 | 4,345 | 59,416 |
| Pipeline | – | – | 7,037 | – | – | – | 7,922 | – | – | – | – | – | 7,467 | 530 | 1,143 | 24,099 |
| Natural Gas Processing Plant | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 1 | 0 | 0 | 5 | 0 | 0 | 5 |
| Total | – | – | 52,081 | – | – | – | 30,952 | – | – | – | – | – | 28,281 | 2,989 | 10,882 | 125,185 |
| **Residual Fuel Oils** | | | | | | | | | | | | | | | | |
| Refinery | 1,951 | 83 | 2,034 | 2,267 | 252 | 178 | 2,697 | 207 | 3,321 | 2,614 | 181 | 19 | 6,342 | 524 | 5,304 | 16,901 |
| Bulk Terminal | – | – | 12,895 | – | – | – | 838 | – | – | – | – | – | 4,483 | 0 | 2,663 | 20,879 |
| Pipeline | – | – | 0 | – | – | – | 0 | – | – | – | – | – | 0 | 0 | 60 | 60 |
| Total | – | – | 14,929 | – | – | – | 3,535 | – | – | – | – | – | 10,825 | 524 | 8,027 | 37,840 |
| **Naphtha < 400 Deg. Petro. Feed. Use** | | | | | | | | | | | | | | | | |
| Refinery | 468 | 0 | 468 | 315 | 0 | 89 | 404 | 43 | 774 | 237 | 42 | 11 | 1,107 | 8 | 122 | 2,109 |
| Total | 468 | 0 | 468 | 315 | 0 | 89 | 404 | 43 | 774 | 237 | 42 | 11 | 1,107 | 8 | 122 | 2,109 |
| **Other Oils > 400 Deg. Petro. Feed. Use** | | | | | | | | | | | | | | | | |
| Refinery | 6 | 0 | 6 | 2 | 0 | 0 | 2 | 127 | 1,896 | 233 | 0 | 0 | 2,256 | 4 | 215 | 2,483 |
| Total | 6 | 0 | 6 | 2 | 0 | 0 | 2 | 127 | 1,896 | 233 | 0 | 0 | 2,256 | 4 | 215 | 2,483 |

See footnotes at end of table.

## Table 24. Stocks of Crude Oil and Petroleum Products by PAD District, August 31, 1988 (continued)
(Thousand Barrels)

| Commodity | PAD District I |  |  | PAD District II |  |  |  | PAD District III |  |  |  |  |  | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | East Coast | Appalachian No.1 | Total | Ind., Ill., Ky. * | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast |  |
| **Special Naphthas** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 589 | 31 | 620 | 195 | 0 | 106 | 301 | 65 | 1,043 | 7 | 210 | 0 | 1,325 | 8 | 142 | 2,396 |
| Bulk Terminal | -- | -- | 555 | -- | -- | -- | 554 | -- | -- | -- | -- | -- | 109 | 0 | 17 | 1,235 |
| Total | -- | -- | 1,175 | -- | -- | -- | 855 | -- | -- | -- | -- | -- | 1,434 | 8 | 159 | 3,631 |
| **Lubricants** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 271 | 754 | 1,025 | 1,101 | 0 | 362 | 1,463 | 16 | 4,144 | 1,416 | 505 | 0 | 6,081 | 99 | 1,234 | 9,902 |
| Bulk Terminal | -- | -- | 1,890 | -- | -- | -- | 740 | -- | -- | -- | -- | -- | 570 | 1 | 535 | 3,736 |
| Total | -- | -- | 2,915 | -- | -- | -- | 2,203 | -- | -- | -- | -- | -- | 6,651 | 100 | 1,769 | 13,638 |
| **Waxes** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 0 | 74 | 74 | 74 | 0 | 36 | 110 | 67 | 249 | 126 | 29 | 0 | 471 | 92 | 121 | 868 |
| Total | -- | -- | 74 | -- | -- | -- | 110 | -- | -- | -- | -- | -- | 471 | 92 | 121 | 868 |
| **Petroleum Coke** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 641 | 0 | 641 | 361 | 1,479 | 238 | 2,078 | 19 | 518 | 2,209 | 252 | 0 | 2,998 | 22 | 1,820 | 7,559 |
| Total | 641 | 0 | 641 | 361 | 1,479 | 238 | 2,078 | 19 | 518 | 2,209 | 252 | 0 | 2,998 | 22 | 1,820 | 7,559 |
| **Asphalt and Road Oil** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 1,762 | 85 | 1,847 | 3,556 | 1,404 | 903 | 5,863 | 310 | 1,062 | 821 | 1,053 | 191 | 3,437 | 2,034 | 1,614 | 14,795 |
| Bulk Terminal | -- | -- | 3,259 | -- | -- | -- | 2,945 | -- | -- | -- | -- | -- | 660 | 33 | 201 | 7,098 |
| Total | -- | -- | 5,106 | -- | -- | -- | 8,808 | -- | -- | -- | -- | -- | 4,097 | 2,067 | 1,815 | 21,893 |
| **Miscellaneous Products** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 247 | 29 | 276 | 172 | 22 | 11 | 205 | 38 | 493 | 233 | 0 | 0 | 764 | 56 | 216 | 1,517 |
| Bulk Terminal | -- | -- | 508 | -- | -- | -- | 97 | -- | -- | -- | -- | -- | 1,112 | 0 | 27 | 1,744 |
| Pipeline | -- | -- | 0 | -- | -- | -- | 100 | -- | -- | -- | -- | -- | 285 | 0 | 8 | 393 |
| Natural Gas Processing Plant | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 0 | 1 | 0 | 0 | 25 | 0 | 0 | 25 |
| Total | -- | -- | 784 | -- | -- | -- | 402 | -- | -- | -- | -- | -- | 2,186 | 56 | 251 | 3,679 |
| **Total Stocks, All Oils** | -- | -- | 188,339 | -- | -- | -- | 244,217 | -- | -- | -- | -- | -- | 990,456 | 27,971 | 169,754 | 1,620,737 |

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[1] Includes 38,395 thousand barrels of domestic crude oil.

* Effective January 1987 "Appalachian No.2" is combined with "Ind., Ill., Ky.".

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 25. Refinery and Bulk Terminal Stocks of Selected Petroleum Products by State, August 31, 1988
(Thousand Barrels)

| State | Leaded Motor Gasoline | Unleaded Motor Gasoline | Kerosene | Distillate Fuel Oil | Residual Fuel Oil |
|---|---|---|---|---|---|
| **PAD District I Total** | **9,554** | **33,765** | **2,805** | **45,044** | **14,929** |
| Connecticut | 212 | 1,063 | 289 | 4,366 | 273 |
| Delaware, D.C., Maryland | 254 | 1,944 | 237 | 3,542 | 1,266 |
| Florida | 1,456 | 5,034 | 181 | 2,110 | 946 |
| Georgia | 931 | 2,129 | 106 | 1,071 | 134 |
| Maine, New Hampshire, Vermont | 233 | 801 | 302 | 2,173 | 576 |
| Massachusetts | 240 | 1,523 | 75 | 2,838 | 1,277 |
| New Jersey | 1,141 | 7,781 | 69 | 12,527 | 5,936 |
| New York | 1,325 | 2,932 | 251 | 5,177 | 2,432 |
| North Carolina | 998 | 1,812 | 360 | 1,731 | 281 |
| Pennsylvania | 860 | 4,618 | 467 | 4,932 | 1,061 |
| Rhode Island | 666 | 251 | w | 975 | w |
| South Carolina | 487 | 1,287 | 246 | 868 | w |
| Virginia | 659 | 2,413 | 195 | 2,662 | 395 |
| West Virginia | 92 | 177 | w | 72 | w |
| **PAD District II Total** | **10,521** | **25,177** | **1,632** | **23,030** | **3,535** |
| Illinois | 2,026 | 5,534 | 304 | 4,212 | 1,261 |
| Indiana | 1,265 | 3,187 | 160 | 2,344 | 757 |
| Iowa | 563 | 828 | w | 1,324 | w |
| Kansas, Nebraska | 1,059 | 1,795 | 24 | 2,241 | 77 |
| Kentucky | 665 | 1,207 | 92 | 553 | w |
| Michigan | 845 | 2,790 | 126 | 1,886 | 183 |
| Minnesota | 479 | 1,192 | w | 2,429 | 109 |
| Missouri | 461 | 900 | w | 660 | w |
| North Dakota, South Dakota | 195 | 380 | w | 861 | w |
| Ohio | 909 | 3,160 | 528 | 2,069 | 342 |
| Oklahoma | 750 | 1,376 | w | 1,945 | 209 |
| Tennessee | 768 | 1,648 | 58 | 1,047 | 203 |
| Wisconsin | 536 | 1,180 | w | 1,459 | 117 |
| **PAD District III Total** | **7,369** | **21,383** | **1,933** | **20,809** | **10,825** |
| Alabama | 522 | 1,030 | 90 | 1,011 | 1,049 |
| Arkansas | 212 | 334 | w | 176 | w |
| Louisiana | 1,394 | 4,271 | 623 | 3,899 | 4,564 |
| Mississippi | 605 | 1,173 | 15 | 2,236 | w |
| New Mexico | 177 | 238 | w | 274 | 19 |
| Texas | 4,459 | 14,337 | 1,198 | 13,213 | 5,052 |
| **PAD District IV Total** | **1,330** | **1,817** | **34** | **2,459** | **524** |
| Colorado | 330 | 558 | w | 507 | w |
| Idaho | 134 | 233 | w | 196 | w |
| Montana | 393 | 468 | w | 735 | 88 |
| Utah | 174 | 260 | w | 311 | 105 |
| Wyoming | 299 | 298 | w | 710 | w |
| **PAD District V Total** | **5,886** | **13,133** | **231** | **9,739** | **7,967** |
| Alaska | 242 | 406 | w | 1,127 | w |
| Arizona | 270 | 596 | w | 249 | w |
| California | 3,484 | 8,705 | 141 | 5,083 | 4,376 |
| Hawaii | 124 | 542 | w | 441 | w |
| Nevada | 85 | 215 | w | 113 | w |
| Oregon | 518 | 691 | w | 657 | 376 |
| Washington | 1,163 | 1,978 | w | 2,069 | 1,264 |
| **U.S. Total** | **34,660** | **95,275** | **6,635** | **101,081** | **37,780** |

w = Withheld to avoid disclosure of individual company data.
Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 26. Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, and Barge Between PAD Districts, August 1988
(Thousand Barrels)

| Commodity | From I to | | | From II to | | | | From III to | | | | From IV to | | | From V to | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | II | III | V | I | III | IV | V | I | II | IV | V | II | III | V | I | II | III | IV |
| **Crude Oil** | **0** | **0** | **0** | **110** | **2,582** | **783** | **0** | **690** | **44,639** | **0** | **0** | **5,051** | **2,001** | **0** | **1,003** | **0** | **12,884** | **0** |
| **Petroleum Products** | **7,188** | **314** | **0** | **3,856** | **6,610** | **2,144** | **0** | **78,516** | **31,235** | **0** | **1,751** | **1,453** | **1,376** | **1,331** | **0** | **0** | **105** | **0** |
| Pentanes Plus | 0 | 0 | 0 | 0 | 78 | 0 | 0 | 0 | 486 | 0 | 0 | 74 | 106 | 0 | 0 | 0 | 0 | 0 |
| Liquefied Petroleum Gases | 0 | 0 | 0 | 745 | 3,676 | 36 | 0 | 1,819 | 4,095 | 0 | 0 | 531 | 1,270 | 0 | 0 | 0 | 0 | 0 |
| Unfinished Oils | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 154 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Blending Components | | | | | | | | | | | | | | | | | | |
| Motor Gasoline | 30 | 95 | 0 | 106 | 0 | 0 | 0 | 53 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Aviation Gasoline | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Finished Motor Gasoline | 5,046 | 0 | 0 | 1,666 | 1,502 | 1,238 | 0 | 44,175 | 17,607 | 0 | 921 | 511 | 0 | 803 | 0 | 0 | 0 | 0 |
| Finished Leaded Motor Gasoline | 1,079 | 0 | 0 | 105 | 355 | 276 | 0 | 6,428 | 3,359 | 0 | 227 | 223 | 0 | 383 | 0 | 0 | 0 | 0 |
| Finished Unleaded Motor Gasoline | 3,967 | 0 | 0 | 1,561 | 1,147 | 962 | 0 | 37,747 | 14,248 | 0 | 694 | 288 | 0 | 420 | 0 | 0 | 0 | 0 |
| Finished Aviation Gasoline | 7 | 0 | 0 | 0 | 0 | 26 | 0 | 250 | 145 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Naphtha-Type Jet Fuel | 0 | 0 | 0 | 0 | 46 | 0 | 0 | 268 | 0 | 0 | 269 | 25 | 0 | 92 | 0 | 0 | 0 | 0 |
| Kerosene-Type Jet Fuel | 214 | 0 | 0 | 210 | 272 | 606 | 0 | 9,644 | 3,074 | 0 | 132 | 4 | 0 | 53 | 0 | 0 | 0 | 0 |
| Kerosene | 0 | 0 | 0 | 13 | 150 | 0 | 0 | 369 | 36 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Distillate Fuel Oil | 1,801 | 0 | 0 | 653 | 446 | 238 | 0 | 19,801 | 4,592 | 0 | 378 | 308 | 0 | 383 | 0 | 0 | 0 | 0 |
| Residual Fuel Oil | 0 | 0 | 0 | 12 | 413 | 0 | 0 | 276 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Petrochemical Feedstocks[1] | 77 | 0 | 0 | 33 | 18 | 0 | 0 | 12 | 68 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Special Naphthas | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 264 | 142 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lubricants | 9 | 81 | 0 | 101 | 9 | 0 | 0 | 1,029 | 336 | 0 | 51 | 0 | 0 | 0 | 0 | 0 | 105 | 0 |
| Waxes | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Asphalt and Road Oil | 0 | 126 | 0 | 317 | 0 | 0 | 0 | 324 | 654 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Miscellaneous Products | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 78 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | **7,188** | **314** | **0** | **3,966** | **9,192** | **2,927** | **0** | **79,206** | **75,874** | **0** | **1,751** | **6,504** | **3,377** | **1,331** | **1,003** | **0** | **12,989** | **0** |

[1] Includes naphtha less than 400 degrees F endpoint and other oils equal to or greater than 400 degrees F endpoint.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 27. Movements of Crude Oil and Petroleum Products by Pipeline Between PAD Districts, August 1988
(Thousand Barrels)

| Commodity | From I to | | From II to | | | From III to | | | | From IV to | | | From V to | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | II | III | I | III | IV | I | II | IV | V | II | III | V | III | IV |
| **Crude Oil** | 0 | 0 | 0 | 2,582 | 783 | 0 | 44,639 | 0 | 0 | 5,051 | 2,001 | 0 | 3,154 | 0 |
| **Petroleum Products** | 7,068 | 0 | 1,825 | 6,161 | 2,144 | 63,763 | 26,185 | 0 | 1,700 | 1,453 | 1,376 | 1,331 | 0 | 0 |
| Pentanes Plus | 0 | 0 | 0 | 78 | 0 | 0 | 486 | 0 | 0 | 74 | 106 | 0 | 0 | 0 |
| Liquefied Petroleum Gases | 0 | 0 | 745 | 3,667 | 36 | 1,677 | 4,085 | 0 | 0 | 531 | 1,270 | 0 | 0 | 0 |
| Blending Components | | | | | | | | | | | | | | |
| Motor Gasoline | 0 | 0 | 106 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Aviation Gasoline | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Finished Motor Gasoline | 5,046 | 0 | 766 | 1,502 | 1,238 | 36,271 | 15,185 | 0 | 921 | 511 | 0 | 803 | 0 | 0 |
| Finished Leaded Motor Gasoline | 1,079 | 0 | 32 | 355 | 276 | 5,448 | 2,775 | 0 | 227 | 223 | 0 | 383 | 0 | 0 |
| Finished Unleaded Motor Gasoline | 3,967 | 0 | 734 | 1,147 | 962 | 30,823 | 12,410 | 0 | 694 | 288 | 0 | 420 | 0 | 0 |
| Finished Aviation Gasoline | 7 | 0 | 0 | 0 | 26 | 45 | 106 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Naphtha-Type Jet Fuel | 0 | 0 | 0 | 46 | 0 | 268 | 0 | 0 | 269 | 25 | 0 | 92 | 0 | 0 |
| Kerosene-Type Jet Fuel | 214 | 0 | 64 | 272 | 606 | 8,130 | 2,793 | 0 | 132 | 4 | 0 | 53 | 0 | 0 |
| Kerosene | 0 | 0 | 0 | 150 | 0 | 350 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Distillate Fuel Oil | 1,801 | 0 | 144 | 446 | 238 | 17,022 | 3,530 | 0 | 378 | 308 | 0 | 383 | 0 | 0 |
| Residual Fuel Oil | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Miscellaneous Products | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | 7,068 | 0 | 1,825 | 8,743 | 2,927 | 63,763 | 70,824 | 0 | 1,700 | 6,504 | 3,377 | 1,331 | 3,154 | 0 |

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 28. Movements of Crude Oil and Petroleum Products by Tanker and Barge Between PAD Districts, August 1988
(Thousand Barrels)

| Commodity | From I to | | | From II to | | | From III to | | | | | | From V to | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | II | III | V | I | III | V | I | New England | Central Atlantic | Lower Atlantic | II | V | I | II | III |
| **Crude Oil** | 0 | 0 | 0 | 110 | 0 | 0 | 690 | 0 | 690 | 0 | 0 | 0 | 1,003 | 0 | 9,730 |
| **Petroleum Products** | 120 | 314 | 0 | 2,031 | 449 | 0 | 14,753 | 38 | 2,000 | 12,715 | 5,050 | 51 | 0 | 0 | 105 |
| Liquefied Petroleum Gases | 0 | 0 | 0 | 0 | 9 | 0 | 142 | 0 | 0 | 142 | 10 | 0 | 0 | 0 | 0 |
| Unfinished Oils | 4 | 0 | 0 | 0 | 0 | 0 | 154 | 0 | 34 | 120 | 0 | 0 | 0 | 0 | 0 |
| Motor Gasoline Blending Components | 30 | 95 | 0 | 0 | 0 | 0 | 53 | 0 | 53 | 0 | 0 | 0 | 0 | 0 | 0 |
| Finished Motor Gasoline | 0 | 0 | 0 | 900 | 0 | 0 | 7,904 | 0 | 13 | 7,891 | 2,422 | 0 | 0 | 0 | 0 |
| Finished Leaded Motor Gasoline | 0 | 0 | 0 | 73 | 0 | 0 | 980 | 0 | 0 | 980 | 584 | 0 | 0 | 0 | 0 |
| Finished Unleaded Motor Gasoline | 0 | 0 | 0 | 827 | 0 | 0 | 6,924 | 0 | 13 | 6,911 | 1,838 | 0 | 0 | 0 | 0 |
| Finished Aviation Gasoline | 0 | 0 | 0 | 0 | 0 | 0 | 205 | 38 | 109 | 58 | 39 | 0 | 0 | 0 | 0 |
| Naphtha-Type Jet Fuel | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Kerosene-Type Jet Fuel | 0 | 0 | 0 | 146 | 0 | 0 | 1,514 | 0 | 134 | 1,380 | 281 | 0 | 0 | 0 | 0 |
| Kerosene | 0 | 0 | 0 | 13 | 0 | 0 | 19 | 0 | 0 | 19 | 36 | 0 | 0 | 0 | 0 |
| Distillate Fuel Oil | 0 | 0 | 0 | 509 | 0 | 0 | 2,779 | 0 | 950 | 1,829 | 1,062 | 0 | 0 | 0 | 0 |
| Residual Fuel Oil | 0 | 0 | 0 | 12 | 413 | 0 | 276 | 0 | 0 | 276 | 0 | 0 | 0 | 0 | 0 |
| Petrochemical Feedstocks[1] | 77 | 0 | 0 | 33 | 18 | 0 | 12 | 0 | 0 | 12 | 68 | 0 | 0 | 0 | 0 |
| Special Naphthas | 0 | 2 | 0 | 0 | 0 | 0 | 264 | 0 | 108 | 156 | 142 | 0 | 0 | 0 | 0 |
| Lubricants | 9 | 81 | 0 | 101 | 9 | 0 | 1,029 | 0 | 508 | 521 | 336 | 51 | 0 | 0 | 105 |
| Waxes | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Asphalt and Road Oil | 0 | 126 | 0 | 317 | 0 | 0 | 324 | 0 | 13 | 311 | 654 | 0 | 0 | 0 | 0 |
| Miscellaneous Products | 0 | 10 | 0 | 0 | 0 | 0 | 78 | 0 | 78 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | 120 | 314 | 0 | 2,141 | 449 | 0 | 15,443 | 38 | 2,690 | 12,715 | 5,050 | 51 | 1,003 | 0 | 9,835 |

[1] Includes naphtha less than 400 degrees F endpoint and other oils equal to or greater than 400 degrees F endpoint.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 29. Net Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, and Barge Between PAD Districts, August 1988

(Thousand Barrels)

| Commodity | PAD District I | | | PAD District II | | | PAD District III | | | PAD District IV | | | PAD District V | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Receipts into PADD I | Shipments from PADD I | Net Receipts PADD I | Receipts into PADD II | Shipments from PADD II | Net Receipts PADD II | Receipts into PADD III | Shipments from PADD III | Net Receipts PADD III | Receipts into PADD IV | Shipments from PADD IV | Net Receipts PADD IV | Receipts into PADD V | Shipments from PADD V | Net Receipts PADD V |
| **Crude Oil** | **1,803** | **0** | **1,803** | **49,690** | **3,475** | **46,215** | **17,467** | **45,329** | **-27,862** | **783** | **7,052** | **-6,269** | **0** | **13,887** | **-13,887** |
| **Petroleum Products** | **82,372** | **7,502** | **74,870** | **39,876** | **12,610** | **27,266** | **8,405** | **111,502** | **-103,097** | **2,144** | **4,160** | **-2,016** | **3,082** | **105** | **2,977** |
| Pentanes Plus | 0 | 0 | 0 | 560 | 78 | 482 | 184 | 486 | -302 | 0 | 180 | -180 | 0 | 0 | 0 |
| Liquefied Petroleum Gases | 2,564 | 0 | 2,564 | 4,626 | 4,457 | 169 | 4,946 | 5,914 | -968 | 36 | 1,801 | -1,765 | 0 | 0 | 0 |
| Unfinished Oils | 154 | 4 | 150 | 4 | 0 | 4 | 0 | 154 | -154 | 0 | 0 | 0 | 0 | 0 | 0 |
| Blending Components | | | | | | | | | | | | | | | |
| Motor Gasoline | 159 | 125 | 34 | 30 | 106 | -76 | 95 | 53 | 42 | 0 | 0 | 0 | 0 | 0 | 0 |
| Aviation Gasoline | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Finished Motor Gasoline | 45,841 | 5,046 | 40,795 | 23,164 | 4,406 | 18,758 | 1,502 | 62,703 | -61,201 | 1,238 | 1,314 | -76 | 1,724 | 0 | 1,724 |
| Finished Leaded Motor Gasoline | 6,533 | 1,079 | 5,454 | 4,661 | 736 | 3,925 | 355 | 10,014 | -9,659 | 276 | 606 | -330 | 610 | 0 | 610 |
| Finished Unleaded Motor Gasoline | 39,308 | 3,967 | 35,341 | 18,503 | 3,670 | 14,833 | 1,147 | 52,689 | -51,542 | 962 | 708 | 254 | 1,114 | 0 | 1,114 |
| Finished Aviation Gasoline | 250 | 7 | 243 | 152 | 26 | 126 | 0 | 395 | -395 | 26 | 0 | 26 | 0 | 0 | 0 |
| Naphtha-Type Jet Fuel | 268 | 0 | 268 | 25 | 46 | -21 | 46 | 537 | -491 | 0 | 117 | -117 | 361 | 0 | 361 |
| Kerosene-Type Jet Fuel | 9,854 | 214 | 9,640 | 3,292 | 1,088 | 2,204 | 272 | 12,850 | -12,578 | 606 | 57 | 549 | 185 | 0 | 185 |
| Kerosene | 382 | 0 | 382 | 36 | 163 | -127 | 150 | 405 | -255 | 0 | 0 | 0 | 0 | 0 | 0 |
| Distillate Fuel Oil | 20,454 | 1,801 | 18,653 | 6,701 | 1,337 | 5,364 | 446 | 24,771 | -24,325 | 238 | 691 | -453 | 761 | 0 | 761 |
| Residual Fuel Oil | 288 | 0 | 288 | 0 | 425 | -425 | 413 | 276 | 137 | 0 | 0 | 0 | 0 | 0 | 0 |
| Petrochemical Feedstocks[1] | 45 | 77 | -32 | 145 | 51 | 94 | 18 | 80 | -62 | 0 | 0 | 0 | 0 | 0 | 0 |
| Special Naphthas | 264 | 2 | 262 | 142 | 0 | 142 | 2 | 406 | -404 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lubricants | 1,130 | 90 | 1,040 | 345 | 110 | 235 | 195 | 1,416 | -1,221 | 0 | 0 | 0 | 51 | 105 | -54 |
| Waxes | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Asphalt and Road Oil | 641 | 126 | 515 | 654 | 317 | 337 | 126 | 978 | -852 | 0 | 0 | 0 | 0 | 0 | 0 |
| Miscellaneous Products | 78 | 10 | 68 | 0 | 0 | 0 | 10 | 78 | -68 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | **84,175** | **7,502** | **76,673** | **89,566** | **16,085** | **73,481** | **25,872** | **156,831** | **-130,959** | **2,927** | **11,212** | **-8,285** | **3,082** | **13,992** | **-10,910** |

[1] Includes naphtha less than 400 degrees F endpoint and other oils equal to or greater than 400 degrees F endpoint.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

(Thousand Barrels)

| Commodity | PAD District I |  |  | PAD District II |  |  |  | PAD District III |  |  |  |  |  | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | East Coast | Appalachian No.1 | Total | Ind., Ill., Ky. * | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast |  |
| **Residual Fuel Oil** | **3,792** | **45** | **3,837** | **1,647** | **222** | **151** | **2,020** | **409** | **4,771** | **3,885** | **251** | **14** | **9,330** | **318** | **11,256** | **26,761** |
| 0.00 to 0.30% Sulfur | 510 | 7 | 517 | 35 | 0 | 0 | 35 | 78 | 43 | 830 | 71 | 3 | 1,025 | 53 | 1,028 | 2,658 |
| 0.31 to 1.00% Sulfur | 2,181 | 0 | 2,181 | 178 | 0 | 82 | 260 | 218 | 1,290 | 542 | 128 | 11 | 2,189 | 11 | 1,498 | 6,139 |
| Greater Than 1.00% Sulfur | 1,101 | 38 | 1,139 | 1,434 | 222 | 69 | 1,725 | 113 | 3,438 | 2,513 | 52 | 0 | 6,116 | 254 | 8,730 | 17,964 |

* Effective January 1987 "Appalachian No.2" is combined with "Ind., Ill., Ky.".

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 31. Stocks of Residual Fuel Oil by Sulfur Content by PAD District, August 31, 1988

(Thousand Barrels)

| Commodity | PAD District I |  |  | PAD District II |  |  |  | PAD District III |  |  |  |  |  | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | East Coast | Appalachian No.1 | Total | Ind., Ill., Ky. * | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast |  |
| **Residual Fuel Oil – 0.00 to 0.30% Sulfur** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 314 | 60 | 374 | 28 | 0 | 0 | 28 | 32 | 86 | 668 | 3 | 10 | 799 | 59 | 724 | 1,984 |
| Bulk Terminal | – | – | 3,222 | – | – | – | 175 | – | – | – | – | – | 57 | 0 | 0 | 3,454 |
| **Total** | **–** | **–** | **3,596** | **–** | **–** | **–** | **203** | **–** | **–** | **–** | **–** | **–** | **856** | **59** | **724** | **5,438** |
| **Residual Fuel Oil – 0.31 to 1.00% Sulfur** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 932 | 0 | 932 | 396 | 0 | 69 | 465 | 31 | 739 | 114 | 132 | 9 | 1,025 | 116 | 724 | 3,262 |
| Bulk Terminal | – | – | 4,913 | – | – | – | 324 | – | – | – | – | – | 2,510 | 0 | 466 | 8,213 |
| **Total** | **–** | **–** | **5,845** | **–** | **–** | **–** | **789** | **–** | **–** | **–** | **–** | **–** | **3,535** | **116** | **1,190** | **11,475** |
| **Residual Fuel Oil – Greater than 1.00% Sulfur** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 705 | 23 | 728 | 1,843 | 252 | 109 | 2,204 | 144 | 2,496 | 1,832 | 46 | 0 | 4,518 | 349 | 3,856 | 11,655 |
| Bulk Terminal | – | – | 4,760 | – | – | – | 339 | – | – | – | – | – | 1,916 | 0 | 2,197 | 9,212 |
| **Total** | **–** | **–** | **5,488** | **–** | **–** | **–** | **2,543** | **–** | **–** | **–** | **–** | **–** | **6,434** | **349** | **6,053** | **20,867** |

* Effective January 1987 "Appalachian No.2" is combined with "Ind., Ill., Ky.".

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 32. Movements of Residual Fuel Oil by Tanker and Barge Between PAD Districts, by Sulfur Content, August 1988

(Thousand Barrels)

| Commodity | From I to |  |  | From II to |  |  | From III to |  |  |  |  |  | From V to |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | II | III | V | I | III | V | I | New England | Central Atlantic | Lower Atlantic | II | V | I | II | III |
| **Residual Fuel Oil** | **0** | **0** | **0** | **12** | **413** | **0** | **276** | **0** | **0** | **276** | **0** | **0** | **0** | **0** | **0** |
| 0.00 to 0.30% Sulfur | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0.31 to 1.00% Sulfur | 0 | 0 | 0 | 0 | 0 | 0 | 126 | 0 | 0 | 126 | 0 | 0 | 0 | 0 | 0 |
| Greater Than 1.00% Sulfur | 0 | 0 | 0 | 12 | 413 | 0 | 150 | 0 | 0 | 150 | 0 | 0 | 0 | 0 | 0 |

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 33. Imports of Residual Fuel Oil by Sulfur Content by Country of Origin, August 1988
(Thousand Barrels)

| Country | Residual Fuel Oil | | | |
|---|---|---|---|---|
| | 0.00 to 0.30% | 0.31 to 1.00% | Greater Than 1.00% | Total |
| **Arab OPEC** | | | | |
| Algeria | 1,282 | 0 | 0 | 1,282 |
| Iraq | 0 | 0 | 0 | 0 |
| Kuwait | 0 | 0 | 0 | 0 |
| Libya | 0 | 0 | 0 | 0 |
| Neutral Zone | 0 | 0 | 0 | 0 |
| Qatar | 0 | 0 | 0 | 0 |
| Saudi Arabia | 0 | 0 | 0 | 0 |
| United Arab Emirates | 0 | 0 | 0 | 0 |
| Subtotal Arab OPEC | 1,282 | 0 | 0 | 1,282 |
| **Other OPEC** | | | | |
| Ecuador | 0 | 0 | 180 | 180 |
| Gabon | 0 | 0 | 0 | 0 |
| Indonesia | 0 | 0 | 0 | 0 |
| Iran | 0 | 0 | 0 | 0 |
| Nigeria | 0 | 267 | 144 | 411 |
| Venezuela | 721 | 287 | 1,499 | 2,507 |
| Subtotal Other OPEC | 721 | 554 | 1,823 | 3,098 |
| **Other** | | | | |
| Angola | 0 | 0 | 0 | 0 |
| Australia | 0 | 0 | 0 | 0 |
| Bahamas | 0 | 0 | 362 | 362 |
| Bolivia | 0 | 0 | 0 | 0 |
| Brazil | 316 | 0 | 0 | 316 |
| Brunei | 0 | 0 | 0 | 0 |
| Canada | 192 | 587 | 1,042 | 1,821 |
| China, People's Republic | 0 | 0 | 0 | 0 |
| Congo | 165 | 0 | 0 | 165 |
| Egypt | 0 | 0 | 0 | 0 |
| France | 0 | 0 | 0 | 0 |
| Ghana | 0 | 0 | 0 | 0 |
| Liberia | 0 | 0 | 0 | 0 |
| Malaysia | 0 | 0 | 0 | 0 |
| Mexico | 0 | 0 | 686 | 686 |
| Netherlands | 0 | 290 | 0 | 290 |
| Netherlands Antilles | 0 | 342 | 0 | 342 |
| Norway | 0 | 0 | 0 | 0 |
| Oman | 0 | 0 | 0 | 0 |
| Peru | 0 | 209 | 661 | 870 |
| Puerto Rico | 0 | 0 | 0 | 0 |
| Romania | 0 | 0 | 330 | 330 |
| Spain | 0 | 198 | 600 | 798 |
| Syria | 0 | 0 | 0 | 0 |
| Trinidad | 0 | 0 | 326 | 326 |
| Tunisia | 0 | 0 | 0 | 0 |
| United Kingdom | 0 | 844 | 0 | 844 |
| Virgin Islands | 87 | 263 | 1,035 | 1,385 |
| Yugoslavia | 0 | 0 | 0 | 0 |
| Zaire | 0 | 0 | 0 | 0 |
| Other Western Hemisphere | 0 | 0 | 891 | 891 |

See footnotes at end of table.

| Country | Residual Fuel Oil | | | |
|---|---|---|---|---|
| | 0.00 to 0.30% | 0.31 to 1.00% | Greater Than 1.00% | Total |
| **Other** | | | | |
| Other Eastern Hemisphere | 505 | 871 | 782 | 2,158 |
| Subtotal Other | 1,265 | 3,604 | 6,715 | 11,584 |
| **Total Imports** | **3,268** | **4,158** | **8,538** | **15,964** |

Note: Total may not equal sum of components due to independent rounding.
Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 34. Imports of Residual Fuel Oil by Sulfur Content by State of Entry, August 1988
(Thousand Barrels)

| State | Residual Fuel Oil | | | |
|---|---|---|---|---|
| | 0.00 to 0.30% | 0.31 to 1.00% | Greater Than 1.00% | Total |
| **PAD District I** | **2,883** | **4,080** | **7,383** | **14,346** |
| Florida | 0 | 269 | 353 | 622 |
| Georgia | 0 | 0 | 170 | 170 |
| Maine | 0 | 413 | 16 | 429 |
| Maryland | 165 | 400 | 362 | 927 |
| Massachusetts | 574 | 554 | 2,419 | 3,547 |
| New Hampshire | 0 | 0 | 50 | 50 |
| New Jersey | 210 | 600 | 831 | 1,641 |
| New York | 1,934 | 774 | 1,877 | 4,585 |
| North Carolina | 0 | 0 | 204 | 204 |
| Pennsylvania | 0 | 1,070 | 573 | 1,643 |
| South Carolina | 0 | 0 | 125 | 125 |
| Vermont | 0 | 0 | 6 | 6 |
| Virginia | 0 | 0 | 397 | 397 |
| **PAD District II** | **192** | **0** | **60** | **252** |
| Michigan | 192 | 0 | 35 | 227 |
| North Dakota | 0 | 0 | 25 | 25 |
| **PAD District III** | **0** | **0** | **1,094** | **1,094** |
| Alabama | 0 | 0 | 377 | 377 |
| Louisiana | 0 | 0 | 717 | 717 |
| **PAD District IV** | **0** | **0** | **1** | **1** |
| Montana | 0 | 0 | 1 | 1 |
| **PAD District V** | **193** | **78** | **0** | **271** |
| Hawaii | 193 | 0 | 0 | 193 |
| Oregon | 0 | 39 | 0 | 39 |
| Washington | 0 | 39 | 0 | 39 |
| **All PAD Districts** | **3,268** | **4,158** | **8,538** | **15,964** |

Note: Total may not equal sum of components due to independent rounding.
Sources and estimation procedures: See Explanatory Notes 1 and 2.

# Appendix A

## District Descriptions and Maps

## Appendix A

# District Descriptions and Maps

The following are the Refining Districts which make up the Petroleum Administration for Defense (PAD) Districts.

## PAD District I

*East Coast:* District of Columbia and the States of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New Jersey, Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, Florida, and the ollowing counties of the State of New York: Cayuga, Tompkins, Chemung, and all counties east and north thereof. Also the following counties in the State of Pennsylvania: Bradford, Sullivan, Columbia, Montour, Northumberland, Dauphin, York, and all counties east thereof.

*ppalachian No. 1:* The State of West Virginia and those arts of the States of Pennsylvania and New York not included n the East Coast District.

## PAD District II

*ndiana-Illinois-Kentucky*: The States of Indiana, Illinois, entucky, Tennessee, Michigan, and Ohio.

*Iinnesota-Wisconsin-North and South Dakota:* The States f Minnesota, Wisconsin, North Dakota, and South Dakota.

*klahoma-Kansas-Missouri:* The States of Oklahoma, ansas, Missouri, Nebraska, and Iowa.

## PAD District III

*exas Inland:* The State of Texas except the Texas Gulf Coast istrict.

*Texas Gulf Coast:* The following counties of the State of Texas: Newton, Orange, Jefferson, Jasper, Tyler, Hardin, Liberty, Chambers, Polk, San Jacinto, Montgomery, Harris, Galveston, Waller, Fort Bend, Brazoria, Wharton, Matagorda, Jackson, Victoria, Calhoun, Refugio, Aransas, San Patricio, Nueces, Kleberg, Kenedy, Willacy, and Cameron.

*Louisiana Gulf Coast:* The following Parishes of the State of Louisiana: Vernon, Rapides, Avoyelles, Pointe Coupee, West Feliciana, East Feliciana, Saint Helena, Tangipahoa, Washington, and all Parishes south thereof. Also the following counties of the State of Mississippi: Pearl River, Stone, George, Hancock, Harrison, and Jackson. Also the following counties of the State of Alabama: Mobile and Baldwin.

*North Louisiana-Arkansas:* The State of Arkansas and those parts of the States of Louisiana, Mississippi, and Alabama not included in the Louisiana Gulf Coast District.

*New Mexico:* The State of New Mexico.

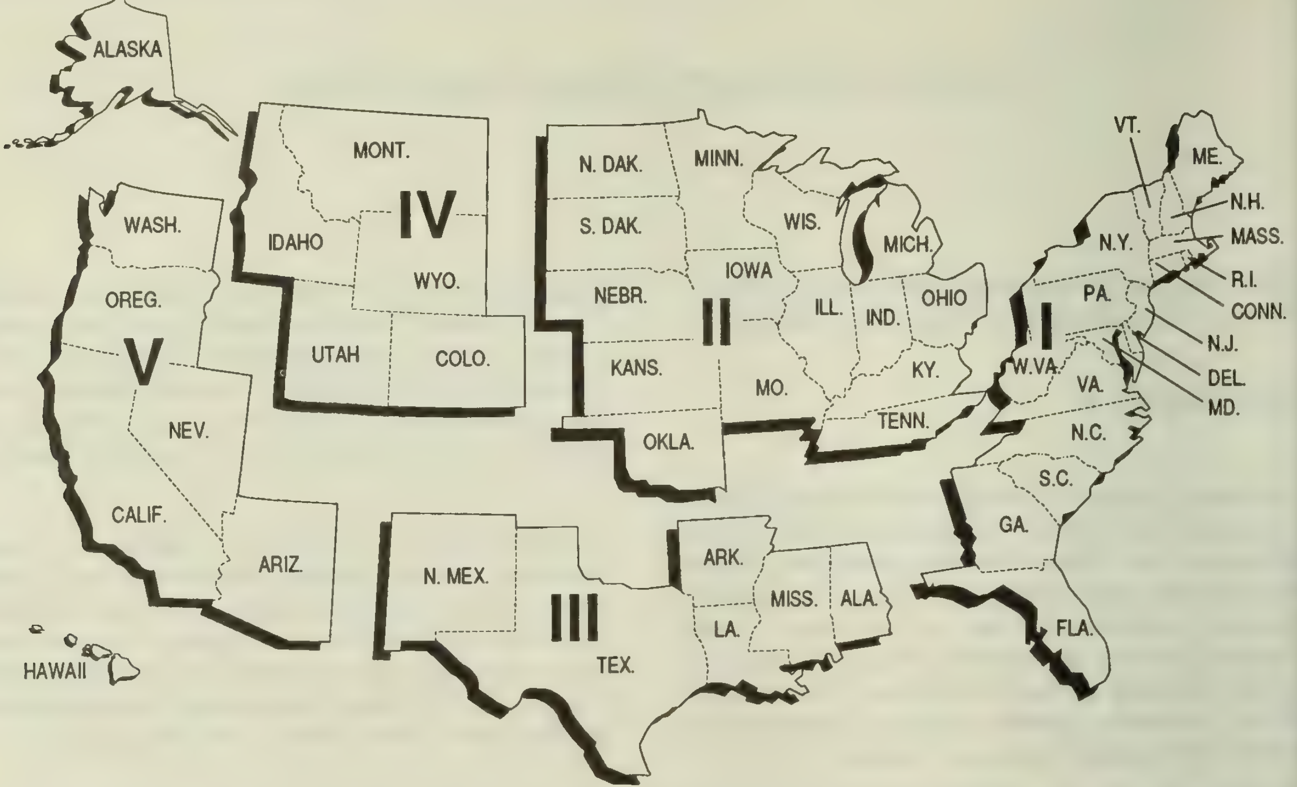
## PAD District IV

*Rocky Mountain:* The States of Montana, Idaho, Wyoming, Utah, and Colorado.

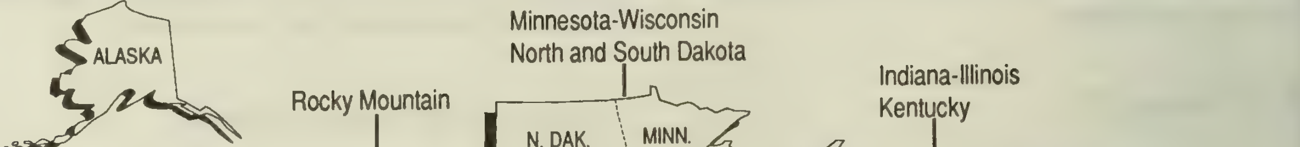
## PAD District V

*West Coast:* The States of Washington, Oregon, California, Nevada, Arizona, Alaska, and Hawaii.

## Petroleum Administration for Defense (PAD) Districts

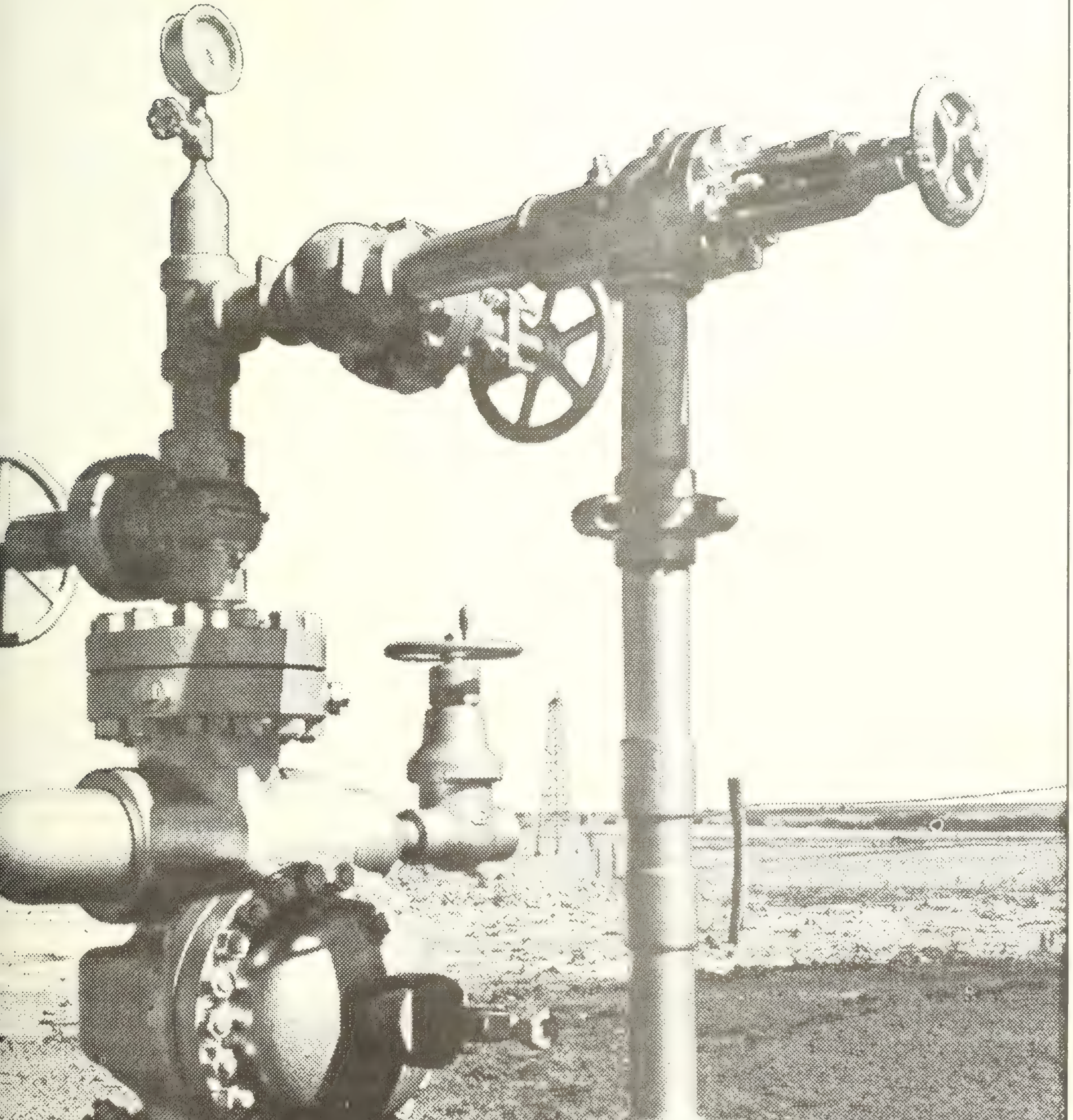


## Refining Districts



# Appendix B

## Explanatory Notes



# Appendix B

# Explanatory Notes

## ote 1: Data Collection Methodology

### ackground

ie Petroleum Supply Reporting System (PSRS) represents a mily of data collection survey forms, data processing sys- ms and publication systems that have been consolidated to hieve comparability and consistency throughout. The sur- y forms that comprise the PSRS are:

| *orm umber* | *Name* |
|---|---|
| A-800 | Weekly Refinery Report |
| A-801 | Weekly Bulk Terminal Report |
| A-802 | Weekly Product Pipeline Report |
| A-803 | Weekly Crude Oil Stocks Report |
| A-804 | Weekly Imports Report |
| A-810 | Monthly Refinery Report |
| A-811 | Monthly Bulk Terminal Report |
| A-812 | Monthly Product Pipeline Report |
| A-813 | Monthly Crude Oil Report |
| A-814 | Monthly Imports Report |
| A-816 | Monthly Natural Gas Liquids Report |
| A-817 | Monthly Tanker and Barge Movement Report |
| A-820 | Annual Refinery Report |

rms EIA-800 through 804 comprise the Weekly Petroleum ipply Reporting System (WPSRS). This system is designed collect weekly data on basic refinery operations and on ude oil and major petroleum products stocks and imports. ata from the WPSRS are published in the *Weekly Petroleum atus Report* (WPSR) and are also used to calculate the eliminary statistics in the "Summary Statistics" section of *Petroleum Supply Monthly* (PSM). A description of the PSRS survey forms follows in Explanatory Note 1.1.

rms EIA-810 through 814, 816, and 817 comprise the onthly Petroleum Supply Reporting System (MPSRS). iese surveys collect detailed refinery and natural gas plant erations data; refinery, bulk terminal, natural gas plant, and peline stocks data; crude oil and petroleum product imports ta; and data on movements of petroleum products and crude between Petroleum Administration for Defense (PAD) stricts. These surveys are the primary source of data for the "Summary Statistics" and "Detailed Statistics" sections of the PSM. A description of MPSRS survey forms follows in Explanatory Note 1.2.

Data are also obtained on magnetic tape from the Bureau of the Census on a monthly basis. These tapes contain aggregated import and export statistics that are used in the preparation of the PSM. A description of the Census data follows in Explanatory Note 1.3.

## Note 1.1: Weekly Petroleum Supply Reporting System (WPSRS)

### Background

The EIA first began publishing weekly petroleum supply statistics in April 1979 using data from an external source. Estimates from the EIA's weekly sample surveys (inaugurated in April 1979) replaced the estimates from the external source for all but the imports series in January 1980, and replaced the imports estimates in June 1980.

The weekly surveys collect data comparable to those collected on a monthly basis. Selected petroleum companies report weekly data to the EIA on crude oil and petroleum product stocks, refinery inputs and production, and crude oil and petroleum product imports. On Forms EIA-800 through EIA-803, companies report data on a custody basis. On the Form EIA-804, the importer of record reports all shipments entering the United States. Current weekly data and the most recent monthly data are used to estimate the totals that are published in the *Weekly Petroleum Status Report*.

### Sample Frame

The sample of companies that report weekly is selected from the universe of companies that report on the comparable monthly surveys. Sampled companies report data only for facilities in the 50 States and District of Columbia.

The sample for each survey is taken from the following universe:

**EIA-800**: Based on the EIA-810 universe which includes all petroleum refineries and blending plants located in the 50 States, District of Columbia, Puerto Rico, the Virgin Islands, and Guam. The selected sample size is 151.

**EIA-801**: Based on the EIA-811 universe which includes every bulk terminal operating in the 50 States, the District of Columbia, Puerto Rico, and the Virgin Islands. A bulk terminal is primarily used for storage and/or marketing of petroleum products and has a total bulk storage capacity of 50,000 barrels or more, and/or receives petroleum products by tanker, barge, or pipeline. Bulk terminal facilities associated with a product pipeline are included. The selected sample size is 68.

**EIA-802**: Based on the EIA-812 universe which includes all product pipeline companies that carry petroleum products (including interstate, intrastate, and intracompany pipelines) in the 50 States and the District of Columbia. The selected sample size is 41.

**EIA-803**: Based on the EIA-813 universe which includes companies that carry or store 1,000 barrels or more of crude oil. Included in this survey are gathering and trunk pipeline companies (including interstate, intrastate, and intracompany pipelines), crude oil producers, terminal operators, storers of crude oil (except refineries), and companies transporting Alaskan crude oil by water in the 50 States and the District of Columbia. The selected sample size is 79.

**EIA-804**: Based on the EIA-814 universe which covers each company, including subsidiary or affiliated companies, that import crude oil, unfinished oils, and finished petroleum products into the United States and Puerto Rico. The selected sample size is 100.

### Sampling Method

The sampling procedure used for the weekly system is the cut-off method. In the cut-off method, companies are ranked from largest to smallest on the basis of the quantities reported during some previous period. Companies are chosen for the sample beginning with the largest and adding companies until the total sample covers about 90 percent of the total for each item and each geographic region for which weekly data are published.

### Collection Methods

Data are collected by mail, mailgram, telephone, Telex, and Telefax on a weekly basis. The report period begins and ends each Friday at 7 a.m. All canvassed firms must file reports by 5 p.m. on the following Monday.

### Estimation and Imputation

After company reports have been checked and entered into the weekly data base, weekly totals for given products are estimated by using the following formula.

The total reported by all companies for the most recent month ($M_t$), is divided by the amount reported by the sample of companies for the most recent month, ($M_s$). The result is multiplied by the amount reported by the sample of companies for the current week, ($W_s$). The answer, $W_t$, is an estimate of the amount that would have been reported by all companies for the current week if all companies reported each week.

$$W_t = \frac{M_t}{M_s}\ (W_s)$$

This procedure is used to estimate total weekly refinery inputs and production.

To estimate stocks of finished products, the preceding procedure is followed separately for refineries, bulk terminals, and pipelines. Total estimates are formed by summing over establishment types.

Weekly imports data are highly variable on a company-by-company basis or a week-by-week basis. Therefore, an exponentially smoothed ratio has been developed. The estimate of weekly imports is the sum of the smoothed ratios multiplied by the weekly values and estimates for shipments from Puerto Rico. Imports of other oils includes an adjustment from Census data for selected products because of coverage differences between the monthly imports data and Census data.

Explicit imputation is done for companies which do not respond in a given week. The imputed values are exponentially smoothed means of recent reports from the specific company.

### Response Rate

The response rate for the published estimates is usually between 97 and 100 percent of the sampled respondents.

## Note 1.2: Monthly Petroleum Supply Reporting System (MPSRS)

### Background

The MPSRS was implemented in January 1983 as the result of an extensive effort to integrate the collection and processing of petroleum supply data that have been collected on other

urvey forms for many years. The collection of monthly
etroleum supply statistics began as early as 1918 when the
ureau of Mines (BOM) began collecting data on refinery
perations and crude oil stocks and movements. The collec-
on systems were further expanded to include natural gas
ant liquids production and storage in 1925, imports of crude
l and petroleum products and storage and movement of
etroleum products in 1959, and tanker and barge movements
f crude oil and petroleum products in 1964. Since their
ception, each survey has undergone numerous changes, but
e MPSRS is the first effort to make them all consistent and
omparable.

### espondent Frame

**IA-810**: All petroleum refineries and blending plants lo-
ted in the 50 States, District of Columbia, Puerto Rico, the
irgin Islands, and Guam. Approximately 260 respondents
port on the EIA-810.

**IA-811**: Every bulk terminal operating in the 50 States, the
istrict of Columbia, Puerto Rico, and the Virgin Islands. A
ılk terminal is primarily used for storage and/or marketing of
etroleum products and has a total bulk storage capacity of
),000 barrels or more, and/or receives petroleum products by
nker, barge, or pipeline. Bulk terminal facilities associated
ith a product pipeline are included. Approximately 320
spondents report on the EIA-811.

**IA-812**: All product pipeline companies that carry petro-
um products (including interstate, intrastate, and intracom-
ıny pipelines) in the 50 States and the District of Columbia.
pproximately 90 respondents report on the EIA-812.

**IA-813**: All companies which carry or store 1,000 barrels or
ore of crude oil. Included in this survey are gathering and
ınk pipeline companies (including interstate, intrastate, and
tracompany pipelines), crude oil producers, terminal opera-
rs, storers of crude oil (except refineries), and companies
ansporting Alaskan crude oil by water in the 50 States and
e District of Columbia. Approximately 180 respondents
port on the EIA-813.

**IA-814**: All companies, including subsidiary or affiliated
mpanies, that import crude oil, unfinished oils, and finished
troleum products into the United States and Puerto Rico.
pproximately 1,500 respondents report on the EIA-814.

**IA-816**: All facilities that extract liquid hydrocarbons from
natural gas stream (natural gas processing plant) and/or
parate a liquid hydrocarbon stream into its component
oducts (fractionator). Approximately 1,050 respondents
port on the EIA-816.

**IA-817**: All companies that have custody of crude oil or
troleum products transported by tanker or barge between
PAD Districts or between the Panama Canal and the United States. For purposes of this report, custody is defined as physical possession of crude oil or petroleum products on a company owned tanker or barge. Also, companies which lease vessels or contract for the movement of crude oil or petroleum products on a tanker or barge between PAD Districts or between the Panama Canal and the United States are considered to have custody. Approximately 50 respondents report on the EIA-817.

EIA utilizes a number of sources and methods to maintain the survey respondent lists. On a regular basis, survey managers review industry publications such as the *Oil and Gas Journal* and *Oil Daily* for information on facilities or companies starting up or closing down operations. These sources are augmented by articles in newspapers, letters from respondents indicating changes in status and information received from survey systems operated by other offices.

Every three years an extensive survey is conducted to completely refresh the frames. This involves consolidating information from every known source including State agencies, Federal agencies (e.g., EPA, Corps of Engineers, Census Bureau, etc.), and private industry directories. The effort also includes the evaluation of the impact of potential frame changes on the historical time series of data published from these respondents. The results of this frame study are usually implemented in January to provide a full year under the same frame.

### Collection Methods

The data for all of the MPSRS surveys are collected monthly. Completed forms are required to be postmarked by the 20th calendar day following the end of the report month, with the exception of the EIA-814 which is due 15 work days following the end of the report month. Telephone follow-up calls are made to nonrespondents prior to the publication deadline, for their data. An automated mailing list is maintained and is used to monitor receipt of the forms.

### Imputing Missing Data

Imputation is performed for companies that do not respond to EIA Forms 810-813 and 816. For such companies, previous monthly values are used for current values. The previous month's ending stocks value is used for both the current month's beginning stocks and the current month's ending stocks. Data for nonrespondents on the EIA-814 and 817 are not imputed.

### Response Rate

The response rate is generally 99 to 100 percent by the time the data are first published. Nonrespondents are contacted in

writing and reminded of their requirement to report. Companies that file late or fail to file are subject to criminal fines, civil penalties, and other sanctions as provided by Section 13(i) of the FEA Act.

## Note 1.3: Census Import (IM-145) and Export (EM-522 and EM-594) Data

### Background

Each month the EIA purchases magnetic tapes of aggregated import and export statistics from the Bureau of the Census. These data tapes are the only source of export statistics and are used to augment the import data collected by the EIA.

### Import Statistics (IM-145)

### Coverage

Census import statistics used in the PSM reflect both government and nongovernment imports of merchandise from foreign countries and U.S. possessions into the United States (the 50 States and the District of Columbia) without regard to whether or not a commercial transaction is involved. The following types of transactions are excluded from the statistics:

1. Merchandise in-transit through the United States, when documented with Customs as an in-transit movement.
2. U.S. merchandise that was held in foreign countries by the U.S. Armed Forces and is returned to the United States for the use of the Armed Forces.

### Source of Import Information

The official U.S. import statistics are compiled by the Bureau of the Census from copies of the import entry and warehouse withdrawal forms that importers are required by law to file with Customs officials (Customs Forms 7501, 7505, and 7506).

### Country and Area of Origin

The country reported in the statistics as the country of origin is defined as the country where the merchandise was grown, mined, or manufactured. In instances where the country of origin cannot be determined, the transactions are credited to the country of shipment.

### Export Statistics (EM-522 and EM-594)

Census export statistics used in the PSM reflect both government and nongovernment exports of domestic and foreig merchandise from the United States (the 50 States and th District of Columbia) to foreign countries and U.S. possessions, without regard to whether or not the exportation involves a commercial transaction. The following types o transactions are excluded from the statistics:

1. Merchandise shipped in-transit through the Unite States from one foreign country to another, when documented as such with U.S. Customs.
2. Bunker fuels and other supplies and equipment for us on departing vessels, planes, or other carriers engaged i foreign trade.

### Source of Export Information

The official U.S. export statistics are compiled by the Burea of the Census. Exporters are required to file export document with Customs officials (Customs Form 7525).

### Country and Area of Destination

The country of destination is defined as the country of ultimat destination or the country where the goods are to be consumed, further processed, or manufactured, as known to the shipper at the time of exportation. If the shipper does not kno the country of ultimate destination, the shipment is credited t the last country to which the shipper knows that the merchandise will be shipped in the same form as it was when exported

## Note 2: Supply

The components of petroleum supply are field production, refinery production, imports, and stock withdrawal or addition:

**Field Production** is the sum of crude oil production (including lease condensate), natural gas processing plant production, and new supply (field production) of other liquids used by refineries.

Crude oil production is estimated based on data received from State conservation agencies. For further explanation, see Explanatory Note 3.

ield production of natural gas plant liquids (NGPL), includng finished petroleum products, is reported monthly on urvey Form EIA-816, *Monthly Natural Gas Liquids Report.* egative production will occur when the amount of a product roduced during the month is less than the amount of that same roduct that is reprocessed (input) or reclassified to become nother product during the same month. For survey descripons and other details, see Explanatory Note 1.2.

**efinery Production** of petroleum products is reported onthly on survey Form EIA-810, *Monthly Refinery Report.* ublished production of these products equals refinery prouction minus refinery input. Refinery production of unfinhed oils and of motor and aviation gasoline blending comonents appears on a net basis under refinery input. Negative roduction will occur when the amount of a product produced uring the month is less than the amount of that same product at is reprocessed (input) or reclassified to become another roduct during the same month.

**nports** of crude oil and petroleum products are reported onthly on Form EIA-814, *Monthly Imports Report.* In ddition, imports of NGL's are obtained from the Census ureau Tabulation IM-145. The Census Bureau Tabulation M-145 summarizes import data from Customs import declations reported on Customs Forms 7501, 7505, and 7506. dditional data taken from the IM-145 are relatively small uantities of naphtha-type and kerosene-type jet fuels, distilte fuel oils, and residual fuel oils withdrawn from bonded orage for use in international trade. Even though these dutyee fuels are stored on United States shores, they did not enter e United States for domestic consumption and therefore are ot included in the Form EIA-814 reporting system.

**tock Withdrawal (+) or Addition (-)** is calculated by subacting stocks at the end of the month from stocks at the ginning of the same month. (Note: The beginning stocks one month are equal to the ending stocks of the previous onth.) A positive result (+) would represent a withdrawal om stocks. A negative result (-) would represent a buildup stocks. For a description of survey forms used to make ock withdrawal or addition calculations, see Explanatory ote 5.

**naccounted-for Crude Oil** is a balancing item that reprents the difference between crude oil supply and disposition. rude oil supply is the sum of field production, imports, and ock withdrawals. Crude oil disposition is the sum of exports, finery input, losses, stock additions, and product supplied. naccounted-for crude oil is calcuated by subtracting crude l supply from crude oil disposition. A positive result dicates that refiners and exporters reported use of more ude oil than was reported to have been available to them. his occurs, for example, when imports are undercounted e to late reporting or other problems.) A negative result ould indicate that more crude oil was reported to have been pplied to refiners and exporters than they reported used.

## Note 3: Domestic Crude Oil Production

Data on crude oil production for States are reported to EIA by State conservation agencies. Data on the volume of oil produced on Federally-owned offshore leases are reported by the Minerals Management Service, U.S. Department of the Interior. All except five of the producing States report data monthly. These States are Michigan, New York, Ohio, Pennsylvania, and Virginia. Estimates of monthly production for these States are made using methodologies explained in the next paragraph. Reported and estimated monthly production volumes are updated as new data are received by EIA. After the end of each calendar year, the monthly numbers are updated further using the annual reports of the State conservation agencies and the Minerals Management Service.

Table 11 of this publication provides information on crude oil production for the most recent month for which State values are available. There is a time lag of approximately 4 months between the end of the reporting month and the time when the monthly State crude oil production data become available. In order to present more timely crude oil production values, the Energy Information Administration prepares a forecast estimate on the first day of the reference month and revised estimates approximately 75 days later which are based on historical production patterns and are summed to obtain national and Petroleum Administration for Defense District (PADD) level crude oil production values. The individual State level estimates are either exponential curve fitted projections based on recent data or are constant level projections based on the average production rate during a recent time period. The forecast estimates are published in the *Weekly Petroleum Status Report* and are also used to calculate the preliminary estimates in the "Summary Statistics" section of the *Petroleum Supply Monthly.*

These forecast estimates are then replaced by the revised estimates in the next issue of the *Petroleum Supply Monthly.*

Table B1 is intended to provide further insight into EIA's estimates of monthly U.S. crude oil production. It shows (a) how the aggregate reported State data evolves over a period of 18 months; (b) the number of producing States that have not reported production for a given month as of the most recent "Date of Data Availibility;" and (c) various EIA estimates of monthly crude oil production within that period:

- The original estimate is used in the *Petroleum Supply Monthly* Tables S1 and S2 until replaced by the interim estimate.

- The interim estimate is used in the *Petroleum Supply Monthly* Tables S1 and S2 until replaced by the final estimate.

- The initial estimate based upon data collected on Form EIA-182, *Domestic Crude Oil First Purchase Report*, is used in generating the interim estimate. The initial volume represents the best estimate available 40 days after the end of the reference month and includes imputation for nonresponse and possible reporting errors. The revised volume is the best estimate available 74 days after the reference month and includes imputation a needed. A final revision is published concurrent wit publication of EIA-182 price data in the *Petroleum Marketing Annual.*

- The final estimate is used in the *Petroleum Suppl Annual.*

## Table B1. U.S. Crude Oil[1] Production Estimates and Reported State[2] Data by Month
(Thousand Barrels per Day)

| Date of Data Availability | 5-87 | 6-87 | 7-87 | 8-87 | 9-87 | 10-87 | 11-87 | 12-87 | 1-88 | 2-88 | 3-88 | 4-88 | 5-88 | 6-88 | 7-88 | 8-88 | 9-88 | 10-88 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Reported State Data[3] | | | | | | | | | | | | | | | | | |
| 6-14-87 | 0 | | | | | | | | | | | | | | | | | |
| 7-14-87 | 2068 | 0 | | | | | | | | | | | | | | | | |
| 8-14-87 | 4654 | 2012 | 0 | | | | | | | | | | | | | | | |
| 9-14-87 | 7218 | 4665 | 1999 | 0 | | | | | | | | | | | | | | |
| 10-14-87 | 8210 | 7672 | 4264 | 1997 | 0 | | | | | | | | | | | | | |
| 11-14-87 | 8211 | 8139 | 7276 | 2971 | 1945 | 0 | | | | | | | | | | | | |
| 12-14-87 | 8255 | 8140 | 7752 | 7724 | 5008 | 2088 | 0 | | | | | | | | | | | |
| 1-14-88 | 8255 | 8179 | 7756 | 7731 | 7252 | 4866 | 2152 | 0 | | | | | | | | | | |
| 2-14-88 | 8256 | 8191 | 8095 | 8034 | 8039 | 7703 | 5296 | 2127 | 0 | | | | | | | | | |
| 3-14-88 | 8256 | 8191 | 8095 | 8071 | 8039 | 8190 | 8205 | 3208 | 2086 | 0 | | | | | | | | |
| 4-14-88 | 8218 | 8157 | 8133 | 8093 | 8090 | 8249 | 8286 | 8204 | 5111 | 2161 | 0 | | | | | | | |
| 5-14-88 | 8336 | 8279 | 8251 | 8210 | 8205 | 8365 | 8401 | 8318 | 7156 | 5743 | 2151 | 0 | | | | | | |
| 6-14-88 | 8336 | 8279 | 8251 | 8210 | 8206 | 8365 | 8403 | 8318 | 8086 | 8103 | 5767 | 2095 | 0 | | | | | |
| 7-14-88 | 8336 | 8279 | 8251 | 8210 | 8206 | 8365 | 8403 | 8319 | 8079 | 8183 | 7270 | 2686 | 2087 | 0 | | | | |
| 8-14-88 | 8341 | 8282 | 8256 | 8212 | 8217 | 8379 | 8411 | 8330 | 8134 | 8198 | 8142 | 7188 | 4859 | 2051 | 0 | | | |
| 9-14-88 | 8341 | 8283 | 8257 | 8212 | 8217 | 8380 | 8412 | 8331 | 8134 | 8240 | 8142 | 8129 | 7968 | 5005 | 2032 | 0 | | |
| 10-14-88 | 8346 | 8287 | 8261 | 8217 | 8222 | 8384 | 8416 | 8335 | 8134 | 8249 | 8184 | 8131 | 8059 | 7904 | 5083 | 2128 | 0 | 0 |
| | Producing States Without Reported Monthly Production[4] | | | | | | | | | | | | | | | | | |
| 10-14-88 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 5 | 6 | 6 | 7 | 14 | 26 | 33 | 33 |

| Type of Estimate | 5-87 | 6-87 | 7-87 | 8-87 | 9-87 | 10-87 | 11-87 | 12-87 | 1-88 | 2-88 | 3-88 | 4-88 | 5-88 | 6-88 | 7-88 | 8-88 | 9-88 | 10-88 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Production Estimate | | | | | | | | | | | | | | | | | |
| Original[5] | 8296 | 8303 | 8287 | 8204 | 8162 | 8281 | 8283 | 8348 | 8395 | 8353 | 8306 | 8269 | 8240 | 8210 | 8189 | 8128 | 8147 | 8085 |
| Interim[6] | 8305 | 8263 | 8242 | 8190 | 8190 | 8293 | 8330 | 8340 | 8245 | 8376 | 8347 | 8268 | 8203 | 8158 | 8059 | 8063 | | |
| Form EIA-182 | | | | | | | | | | | | | | | | | | |
| Initial | 8149 | 8168 | 8078 | 8022 | 8110 | 8151 | 8162 | 8144 | 8017 | 8239 | 8138 | 8106 | 8009 | 8045 | 7853 | 7895 | | |
| Revised | 8161 | 8178 | 8082 | 8032 | 8084 | 8153 | 8173 | 8180 | 8048 | 8206 | 8134 | 8099 | 8015 | 8044 | 7839 | | | |
| Final[7] | 8336 | 8279 | 8251 | 8210 | 8205 | 8364 | 8397 | 8318 | | | | | | | | | | |

[1] Includes lease condensate.

[2] Includes Federal offshore areas, Gulf of Mexico (PAD District III) and Pacific (PAD District V), as two separate reporting entities.

[3] Includes EIA prorated monthly production in 1987 (annual average of 115 thousand barrels per day) for four States (Michigan, New York, Ohio, and Pennsylvania) for which only annual State data are available.

[4] Michigan monthly production data (averaging roughly 65,000 barrels per day) from January through June 1987, reported in prior months, was excluded from the data reported as of 4-14-88. Michigan, New York, Ohio, and Pennsylvania are counted as having monthly reported data in 1987 after their annual reports were received. These data were first reported as of 5-14-88.

[5] Original estimates were made on the first of each month.

[6] Interim estimates were made 44 days after the end of the production month.

[7] Published in the *Petroleum Supply Annual* 1987 DOE/EIA 0340(87)/2.

## Note 4: Disposition

he components of petroleum disposition are crude oil losses, efinery inputs, exports, and products supplied for domestic onsumption.

**rude Oil Losses** is the sum of crude oil losses at refineries eported for all refineries on Form EIA-810, *Monthly Refinery eport.*

**efinery Inputs** of crude oil, natural gas plant liquids, and her liquids are reported monthly on survey Form EIA-810, *onthly Refinery Report.* Published inputs of unfinished oils nd of motor and aviation gasoline blending components qual refinery input minus refinery output. Refinery inputs of nished petroleum products are reported on a net basis under efinery production.

**xports** of crude oil and petroleum products are compiled om Census Bureau tabulations EM-522 and EM-594. xports include crude oil shipments to Puerto Rico, and the irgin Islands, which are obtained from refinery receipts eported on Form EIA-810, *Monthly Refinery Report,* by efineries located in these places.

**roduct Supplied** for each product is calculated by summing eld production plus refinery production, plus imports, plus ock withdrawal or minus stock addition, minus crude oil sses (plus net receipts when calculated on a PAD District asis), minus refinery input, minus exports. This formula nsures that total disposition equals total supply.

roduct supplied indicates those quantities of petroleum roducts supplied for domestic consumption. Occasionally, e result for a product is negative because total disposition of e product exceeds total supply. Negative product supplied ay occur for a number of reasons: (1) product reclassifica- on has not been reported; (2) data were misreported or eported late; (3) in the case of calculations on a PAD District asis, the figure for net receipts was inaccurate because the overage of interdistrict movements was incomplete; and (4) roducts such as gasoline blending components and unfin- hed oils have entered the primary supply channels with their roduction net having been reported, e.g., streams returned to efineries from petrochemical plants.

roduct supplied for crude oil is the sum of crude oil burned n leases and by pipelines as fuel oil. These data are reported n Form EIA-813, *Monthly Crude Oil Report.* Prior to anuary 1983, crude oil burned on leases and by pipelines as uel oil were reported as either distillate or residual fuel oil and ncluded in product supplied for these products.

## Note 5: Stocks

Primary stocks of crude oil are the sum of ending stocks reported monthly on Form EIA-810, *Monthly Refinery Report,* and on Form EIA-813, *Monthly Crude Oil Report.* Crude oil held in the Strategic Petroleum Reserve is included unless otherwise noted. Alaskan crude oil in-transit is also included. Primary stocks of petroleum products are summed from data reported on Form EIA-816, *Monthly Natural Gas Liquids Report*, Form EIA-810, *Monthly Refinery Report*, Form EIA-811, *Monthly Bulk Terminal Report*, and on Form EIA-812, *Monthly Product Pipeline Report.* Primary stocks of petroleum products do not include either secondary stocks held by dealers and jobbers or tertiary stocks held by consumers. For survey descriptions and other details, see Explanatory Note 1.2.

## Note 6: Average Stock Levels

The national inventory (stocks) graphs for total petroleum products, crude oil, motor gasoline, distillate fuel oil, residual oil, and liquefied petroleum gases, in this publication include features to assist in comparing current inventory levels with past inventory levels and minimum operating levels are described below.

The graphs displaying inventory levels of crude oil and petroleum products, crude oil, motor gasoline, distillate fuel oil, residual fuel oil, and liquefied petroleum gases, provide the reader with actual inventory data compared to an *average range* from the most recent 3-year period running from January through December or from July through June. The ranges are updated every six months in April and October. The 3-year period is adjusted by dropping the oldest 6 months and including the most recent 6 months. The ranges also reflect seasonal variation determined from a longer time period. The seasonal factors, which determine the shape of the upper and lower curves, are updated annually in October, using the most recent year's final monthly data.

The monthly seasonal factors are estimated by means of a seasonal adjustment technique developed at the Bureau of the Census (Census X-11). The seasonal factors are assumed to be stable (i.e., unchanging from year to year) and additive (i.e., the series is deseasonalized by subtracting the seasonal factor for the appropriate month from the report inventory levels). The intent of deseasonalization is to remove only annual variation from the data. Thus, a deseasonalized series would contain the same trends, cyclical components, and irregularities as the original data. The seasonal factors for distillate fuel oil, residual fuel oil, and liquefied petroleum gases, were derived using monthly data from 1979-1985.

After seasonal factors are derived, data from the most recent 3-year period (January-December or July-June) are deseasonalized. The average of the deseasonalized 36-month series determines the midpoint of the deseasonalized average band. The standard deviation of the deseasonalized 36-months is calculated adjusting for extreme data points. The upper curve of the average range is defined as the average plus the seasonal factors plus the standard deviation. The lower curve is defined as the average plus the seasonal factors minus the standard deviation. Thus, the width of the *average range* is twice the standard deviation.

## Note 7: Movements

Movements of crude oil between PAD Districts are reported on Form EIA-817, *Monthly Tanker and Barge Movement Report*, and on Form EIA-813, *Monthly Crude Oil Report.* Petroleum product movements are reported on Form EIA-817, *Monthly Tanker and Barge Movement Report*, and EIA-812, *Monthly Product Pipeline Report.* Net receipts is the difference between total movements into and total movements out of each PAD District by pipeline, tanker, and barge. For survey descriptions and other details, see Explanatory Note 1.2.

## Note 8: Preliminary Monthly Statistics

Weekly data (Forms EIA-800, 801, 802, 803, and 804) are used to estimate the most recent monthly values for the "Summary Statistics" section. Since some of the weekly reporting periods overlap two adjacent months, it is necessary to use weighting factors in the calculation of the monthly values.

To estimate crude oil and petroleum product imports, crude oil input to refineries and production of petroleum products for a specific month, the weekly estimates are weighted by the number of days of that month included in each week, then summed.

End-of-month stock levels of crude oil and the major products (motor gasoline, distillate fuel oil, and residual fuel oil) are calculated in a similar manner, but use only the two weekly reporting periods that cover the end-of-week stocks before and after the end of the month. The end-of-month stock level is calculated by first calculating the stock change between the two weeks. The daily stock change between the two end-of-week stock levels is then calculated. This number is multiplied by the weighting factor of the earlier of the two weeks (the week that covers the last day of the month of interest). This change is added to the earlier of the two end-of-week stock levels to estimate the end-of-month stock level.

Preliminary monthly estimates of domestic crude oil production are calculated as described in Explanatory Note 3.

## Note 9: Notes on Tables

**Note 9.1 Crude Oil and Petroleum Products Overview** statistics on the referenced line appear in Table 4 of the "Detailed Statistics," except where noted.

- Crude Oil and Petroleum Products Stock Withdrawal (+) or Addition (-), Petroleum Products Supplied, Total Imports, Crude Oil Imports, Total Exports, and Crude Oil Exports appear as labeled in Table 4. Total Production and Crude Oil Production appear under Field Production in Table 4.
- Natural Gas Plant Production is the sum of Natural Gas Liquids and Finished Petroleum Products Field Production in Table 4.
- Petroleum Products Imports is the sum of Natural Gas Liquids and LRGs, Other Liquids, and Finished Petroleum Products Imports in Table 4.
- Total Crude Oil and Petroleum Products Ending Stocks appear in thousand barrels in Table 2.

**Note 9.2 Crude Oil Supply and Disposition.** statistics on the referenced line appear in Table 1 of the "Detailed Statistics," except where noted.

- Total Domestic Field Production, Alaskan Field Production, SPR Imports, Other Imports (synonymous with Gross Imports Excl. SPR), SPR and Other Primary Stocks Withdrawal (+) or Addition (-), Unaccounted for Crude Oil, Refinery Inputs, and Exports appear as labeled in Table 1.
- Crude Losses and Product Supplied appear as labeled in Table 4.
- SPR Ending Stocks and Other Primary Ending Stocks (synonymous with stocks excluding SPR) appear in thousand barrels in Table 1.
- Total Crude Oil Ending Stocks appear in thousand barrels in Table 2.
- Total Imports appear in Table 4.

**Note 9.3 Finished Motor Gasoline Supply and Disposition** statistics on the referenced line appear in Table 4 of the "Detailed Statistics," except where noted.

- Total Production is the sum of Field Production and Refinery Production in Table 4.

- Imports, Stock Withdrawal (+) or Addition (-), Exports, and Product Supplied appear as labeled in Table 4.

- Unleaded Percent of Total Product Supplied represents the ratio of finished unleaded motor gasoline product supplied to total finished motor gasoline product supplied, multiplied by 100 and rounded to the nearest tenth.

- Ending stocks are aggregated from ending stocks in thousand barrels in Table 2.

**ote 9.4 Distillate and Residual Fuel Oil Supply and Dis-sition** statistics on the referenced lines appear in Table 4 of e "Detailed Statistics," except where noted.

- Total Production is the sum of Field Production and Refinery Production in Table 4.

- Imports, Stock Withdrawal (+) or Addition (-), Exports, and Product Supplied appear as labeled in Table 4.

- Ending stocks appear in thousand barrels in Table 2.

**ote 9.5 Liquefied Petroleum Gases Supply and Disposi-on** statistics represent the aggregation of statistics on ethane, hylene, propane, propylene, butane, butylene, and isobu-ne. The statistics on the referenced line appear in Table 4 of e "Detailed Statistics," except where noted.

- Total Production is the sum of Field Production and Refinery Production in Table 4.

- Imports, Stocks Withdrawal (+) or Addition (-), Refinery Inputs, Exports, and Product Supplied appear as labeled in Table 4.

- Ending stocks appear in thousand barrels in Table 2.

**ote 9.6 Other Petroleum Products Supply and Disposi-on** statistics represent the aggregation of statistics on pen-nes plus, other liquids, and all finished petroleum products cept finished motor gasoline, distillate fuel oil, residual fuel l, and liquefied petroleum gases. The statistics on the refer-nced line are aggregated from Table 4 of the "Detailed atistics," except where noted.

- Total production is the aggregated sum of Field Production and Refinery Production in Table 4.

- Imports, Stock Withdrawal (+) or Addition (-), Refinery Inputs, Exports, and Product Supplied are aggregated from Table 4.

- Ending stocks are aggregated from ending stocks in thousand barrels in Table 2.

**Note 9.7 Table 1. U.S. Petroleum Balance**

- Lines (1) through (3): Crude oil (including lease condensate) production for *Alaska, Lower 48 States*, and *Total U.S.* are calculated by calling the conservation agency in Alaska for Alaskan crude oil production during the month, estimating crude oil production in the United States (see Explanatory Note 3), and taking the difference to equal production in the Lower 48 States.

- Line (5): *SPR Imports* are reported on survey Form EIA-814.

- Line (12): *Total Other Sources* equals crude oil stock withdrawal (+) or addition (-) plus unaccounted for crude oil minus crude oil losses minus crude oil product supplied in Table 2.

- Line (14): Natural Gas Plant Liquids (NGPL) *Field Production* equals field production of natural gas liquids (NGL) plus field production of finished petroleum products in Table 2.

- Line (15): NGPL *Net Imports* equals the sum of the imports of pentanes plus minus the exports of pentanes plus in Table 2.

- Line (16): NGPL *Stock Withdrawal (+) or Addition (-)* is equal to the stock withdrawal (+) or addition (-) of pentanes plus in Table 2.

- Line (17): *Total NGPL Supply* equals the sum of lines (14), (15), and (16).

- Line (18): Other Liquids *Stock Withdrawal (+) or Addition (-)* equals the aggregate stock withdrawal (+) or addition (-) for other hydrocarbons and alcohol, unfinished oils, motor gasoline blending components, and aviation gasoline blending components in Table 2.

- Line (20): *Other Hydrocarbons and Alcohol New Supply* equals the field production of same in Table 2.

- Line (21): *Refinery Processing Gain* is a balancing item equal to total refinery production minus total refinery input in Table 2.

- Line (23): *Total Other Liquids* equals the sum of lines (18) through (22).

- Line (24): *Total Production of Products* equals crude oil input to refineries plus field production of natural gas

liquids and LRG and finished petroleum products; plus imports of pentanes plus; plus stock withdrawal (+) or addition (-) of pentanes plus; plus stock withdrawal (+) or addition (-) of other liquids; plus imports of other liquids; plus field production of other liquids; plus total refinery production; minus total refinery input; plus crude oil product supplied in Table 2.

- Line (25): *Gross Imports* of Refined Products equals imports of LPG plus imports of finished petroleum products in Table 2.
- Line (26): *Exports* of Refined Products equals exports of LPG plus exports of finished petroleum products in Table 2.
- Line (27): *Net Imports* of Refined Products equals the difference between lines (25) and (26).
- Line (28): *Total New Supply of Products* equals crude oil input to refineries plus field production of natural gas liquids and LRG and finished petroleum products; plus imports of pentanes plus; plus stock withdrawal (+) or addition (-) of pentanes plus; plus stock withdrawal (+) or addition (-) of other liquids; plus imports of other liquids; plus total field production of other liquids; plus total refinery production; minus total refinery input; minus crude oil product supplied plus imports of LPG and finished petroleum products; minus exports of LPG and finished petroleum products in Table 2.
- Line (29): *Refined Products Stock Withdrawal (+) or Addition (-)* equals the sum of stock withdrawal (+) or addition (-) for LPG and finished petroleum products in Table 2.
- Line (30): *Total Petroleum Products Supplied for Domestic Use* equals total products supplied in Table 2.
- Lines (31) through (34): Equal the respective products supplied in Table 2.
- Line (35): *Other Products Supplied* equals the sum of pentanes plus, aviation gasoline, naphtha-type jet fuel, kerosene-type jet fuel, naphtha <400 Deg. F. for petrochemical feedstock use, other oils >400 Deg. F. for petrochemical feedstock use, special naphthas, lubricants, waxes, petroleum coke, asphalt and road oil, still gas, unfinished oils, motor gasoline blending components, aviation gasoline blending components, and miscellaneous products supplied in Table 2.
- Line (37): *Total Product Supplied* is equal to total products supplied in Table 2.
- The sum of lines (38) and (39): Stocks of *Crude Oil and Lease Condensate (Excluding SPR)* and stocks held by the *Strategic Petroleum Reserve* equals ending stocks of crude oil in Table 2.
- Line (43): Stocks of *Finished Refined Products* equals the sum of liquefied petroleum gases and finished petroleum products stocks in Table 2.

## Note 10: New Stock Basis

In January 1975, 1981, and 1983, numerous respondents were added to bulk terminal and pipeline surveys affecting subsequent stocks reported and stock withdrawal calculations. Using the expanded coverage (new basis), the end-of-year stocks, in million barrels, would have been:

- Crude Oil: 1982 - 645 (Total) and 351 (Other Primary).
- Crude Oil and Petroleum Products: 1974 - 1,121; 1980 - 1,425; and 1982 - 1,462.
- Motor Gasoline: 1974 - 225; 1980 - 263; 1982 - 244 (Total) and 203 (Finished).
- Distillate Fuel Oil: 1974 - 224; 1980 - 205; and 1982 - 186.
- Residual Fuel Oil: 1974 - 75; 1980 - 91; and 1982 - 68.
- Liquefied Petroleum Gases: 1974 - 113; 1980 - 128; and 1982 - 103.
- Other Petroleum Products: 1974 - 220; 1980 - 249; and 1982 - 259.
- Stock withdrawal calculations beginning in 1975, 1981, and 1983 were made using new basis stock levels.

In January 1984, changes were made in the reporting of natural gas liquids. As a result, unfractionated stream, which was formerly included in "Other Petroleum Products Supply and Disposition" table in the "Summary Statistics," is now reported on a component basis (ethane, propane, normal butane, isobutane, and pentanes plus). Most of these stocks will now appear in the "Liquefied Petroleum Gases Supply and Disposition" table of the "Summary Statistics." This change will affect stocks reported and stock withdrawals in each table. Under the new basis, end-of-year 1983 stocks, in million barrels, would have been:

- Liquefied Petroleum Gases: 1983 - 108.
- Other Petroleum Products: 1983 - 248.

## Iote 11: Stocks of Alaskan Crude Oil

tocks of Alaskan crude oil in-transit were included for the rst time in January 1981. The major impact of this change is n the reporting of stock withdrawal calculations. Using the xpanded coverage (new basis), 1980 end-of-year stocks, in illion barrels, would have been 488 (Total) and 380 (Other rimary).

## Iote 12: 1981 Changes in Petroleum ndustry Reporting

etroleum statistics contained in this report for all years rough 1980 were developed using definitions, concepts, eporting procedures, and aggregation methods that are constent with those developed by the U.S. Bureau of Mines. esearch conducted by the Energy Information Administraon in 1979 and 1980 indicated that changes had occurred in e petroleum industry that were not being adequately reected in EIA's reporting system.

IA reporting forms, definitions, and procedures were modied beginning in January 1981 to describe industry operations ore accurately. Unfortunately, empirical information is not vailable to precisely measure the data shortcomings through 980. However, estimates of the magnitudes of differences in e major data series are described below to form a basis for omparing 1979, 1980, and 1981 data.

### Iotor Gasoline

rior to 1979, the EIA product-supplied series for motor asoline was consistently about 2 percent lower than the ederal Highway Administration (FHWA) gasoline-sales ata series, which is derived from State tax receipts. The ifference increased to about 3 percent in 1979 and 1980. here were two primary causes for this growing difference. irst, refinery operations, particularly the flows of unfinished ils and the redesignation of some finished products, were not eing accurately described on the EIA survey forms. Second, large amount of gasoline was being produced away from efineries at "downstream blending stations" to take advanage of provisions in regulations governing the amount of lead at could be added. These blending stations were not reportng gasoline production to the EIA until the data system was hanged in January 1981.

uantitative estimates of the magnitude of the difference in IA's gasoline product supplied data in 1979 and 1980 have een made by the EIA and the American Petroleum Institute API). The following table provides 1979 and 1980 data as ublished in the *Petroleum Statement, Annual*, as well as EIA and API estimates of "recast" motor gasoline product supplied.

EIA recast estimates were based upon preliminary monthly information in the *Monthly Petroleum Statement*. The ranges displayed in the EIA column reflect uncertainty in the estimates. Also shown are the FHWA motor gasoline sales statistics for those years.

### Table B2. Finished Motor Gasoline Product Supplied
(Thousand Barrels per Day)

| | EIA Reported | API Recast | EIA Recast | FHWA[1] |
|---|---|---|---|---|
| 1979 ..... | 7,034 | 7,302 | 7,183-7,347 | 7,258 |
| 1980 ..... | 6,579 | 6,882 | 6,806-6,889 | 6,792 |

[1] FHWA gasoline statistics based on data from Federal Highway Administration, Estimate of Total Gasoline Use, Table MF-21A published October 1980 and September 1981. Aviation gasoline (Table MF-24) has been subtracted from FHWA product supplied quantities to make data comparable.

### Distillate and Residual Fuel Oil

Distillate and residual fuel oil refinery production statistics through 1980 were adjusted to account for an imbalance between unfinished oil supply and disposition. The reported quantities of refinery inputs of unfinished oils typically exceed the available supply of unfinished oils. It has been assumed that this occurs when distillate and residual fuel oils produced by a refinery are shipped to another refinery, where it is treated as unfinished oil. This oil is then reprocessed rather than used or sold as distillate or residual fuel oil.

For many years (including 1980), the difference between unfinished oil disposition and supply was subtracted from distillate and residual fuel oil production to adjust for this discrepancy. Two-thirds of the difference was applied to distillate, and one-third to residual fuel oil.

Beginning in January 1981, this adjustment was discontinued because there was not sufficient empirical evidence to support it. The following table presents distillate and residual fuel oil refinery production in 1979 and 1980 as published (adjusted) and on the same basis as 1981 statistics (unadjusted) to permit comparison.

Adjusted distillate and residual fuel oil product supplied volumes differ from the unadjusted volumes by the same amounts as the adjusted and unadjusted production volumes.

**Table B3. Distillate and Residual Fuel Oil Production and Product Supplied**
(Thousand Barrels per Day)

| | Adjusted Refinery Production | Unadjusted Refinery Production | Difference | Unadjusted Product Supplied |
|---|---|---|---|---|
| Distillate Fuel Oil | | | | |
| 1979 ............ | 3,152 | 3,169 | 16 | 3,327 |
| 1980 ............ | 2,661 | 2,764 | 103 | 2,969 |
| Residual Fuel Oil | | | | |
| 1979 ............ | 1,687 | 1,695 | 8 | 2,83 |
| 1980 ............ | 1,580 | 1,634 | 54 | 2,562 |

### Total Petroleum Products

The imbalance between the supply and disposition of unfinished oils and gasoline blending components is included with other products (line 35) in the U.S. Petroleum Balance (Table 1). These imbalances are reported as negative product supplied in the Other Liquids section, Supply and Disposition Statistics (Table 2). Since these changes only involve redistribution of the volumes of gasoline, distillate and residual fuel oil, gasoline blending components, and unfinished oils, the total volume of petroleum products supplied remains unaffected by them.

## Note 13: Natural Gas Liquids Reporting Changes

Beginning in January 1984, a number of changes in the reporting of natural gas liquids (NGL) were implemented. The modified system reflects supply and disposition of NGL on a component, rather than product, basis.

From 1979 to 1983, the EIA collected and reported information on the supply and disposition of nine NGL products. Beginning with January 1984, NGL supply and disposition data were reported on a five component basis (see Table B4) to be consistent with record-keeping practices used by the industry. The following table shows the product category under the new and old basis. Four PSRS surveys were modified beginning in January 1984. They were:

EIA-810 *Monthly Refinery Report*
EIA-811 *Monthly Bulk Terminal Report*
EIA-812 *Monthly Product Pipeline Report*
EIA-816 *Monthly Natural Gas Liquids Report*

A fifth survey, the Form EIA-814, *Monthly Imports Report* (formerly Form ERA-60), was not modified. Adjustments are applied to NGL imports data to make them consistent with the revised reporting system (See Explanatory Note 14).

**Table B4. Product Basis vs. Component Basis Reporting**

| | 1984 Component Basis | | | | |
|---|---|---|---|---|---|
| 1979-1983 Product Basis | Ethane | Propane | Normal Butane | Isobutane | Pentanes Plus |
| Ethane | • | | | | |
| Ethane-Propane Mixtures | • | • | | | |
| Propane | | • | | | |
| Butane-Propane Mixtures | | • | • | | |
| Butane | | | • | | |
| Isobutane | | | | • | |
| Unfractionated Stream | • | • | • | • | • |
| Natural Gasoline and Isopentane | | | | | • |
| Plant Condensate | | | | | • |

## Note 14: NGL Import/Export Algorithms

Beginning in January 1984, the Energy Information Administration (EIA) implemented changes in the reporting of natural gas liquids (NGL) supply data, moving from a nine-product slate basis to a five-component slate basis that corresponds to industry record-keeping practices. Changes could not be made to the import and export systems. Therefore, in order to allocate imports and exports of mixed NGL streams to individual component parts, the EIA developed a statistical algorithm.

### Imports

The imports algorithm is based on information gathered from the larger importers of NGL, who were asked to provide component analysis of the products they imported during the first six months of 1983. The percentages shown in the following table are derived from the weighted averages of the data provided by the importers.

### Exports

The export algorithm is based on information gathered from the larger exporters of NGL, who were asked to provide component analysis of the products they exported during 1983. The percentages shown in the following table are derived from the weighted averages of the data provided by the exporters. It was necessary to derive percentages by

## Table B5. Algorithm for Allocating NGL Imports/Exports (Percent)

| | EIA Component Slate | | | | |
|---|---|---|---|---|---|
| | Ethane | Propane | Normal Butane | Isobutane | Pentanes Plus |
| nport Product | | | | | |
| Natural Gasoline An Isopentane (EIA-814) | -- | -- | -- | -- | 100 |
| Plant Condensate (EIA-814) | -- | -- | -- | -- | 100 |
| Ethane (IM-145) | 100 | -- | -- | -- | -- |
| Propane (IM-145) | -- | 100 | -- | -- | -- |
| Butane (IM-145) | -- | -- | 65 | 35 | -- |
| Butane-Propane Mixtures (IM-145) | -- | 40 | 35 | 20 | 5 |
| Ethane-Propane Mixtures (IM-145) | 60 | 40 | -- | -- | -- |
| xport Product | | | | | |
| Ethane (All PAD Districts) | 100 | -- | -- | -- | -- |
| Propane (All PAD Districts) | -- | 100 | -- | -- | -- |
| Butane (All PAD Districts) | -- | -- | 100 | -- | -- |
| Mixed Streams | | | | | |
| PAD Districts I, IV, V | -- | 40 | 60 | -- | -- |
| PAD District II | 30 | 25 | 15 | 15 | 15 |
| PAD District III | -- | 80 | 20 | -- | -- |

etroleum Administration for Defense (PAD) Districts of xportation, due to the wide variation of components included n the mixed streams.

## ote 15: Addition of Crude Oil Pipeline Aovements Data

eginning in January 1985, inter-PAD District pipeline novements of crude oil were included in the PSM. Crude oil ipeline movements are used in the crude oil supply balance t the PAD District level but do not affect National level tatistics. As a result of including these movements, *Net eceipts* of crude oil and *Unaccounted for Crude Oil* at the AD District level changed significantly. Also affected were rude oil imports and unfinished oil imports at the PAD istrict level which are provided by *PAD District of entry* Tables 6-10) and by *PAD District of processing* (Tables 16-9).

he tables in the PSM that were changed due to the inclusion f inter-PAD District pipeline movements of crude oil are isted below.

- Tables 6-10, "PAD District I to V, Supply and Disposition of Crude Oil and Petroleum Products." 1985 crude oil imports and unfinished oil imports in Tables 6 through 10 are now reported at the *PAD District of entry* rather than at the *PAD District of processing. Net Receipts* now include movements by pipeline as well as by tanker and barge.
- Table 26, "Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, and Barge Between PAD Districts." The crude oil line includes movements by pipeline as well as by tanker and barge.
- Table 27, "Movements of Crude Oil and Petroleum Products by Pipeline Between PAD Districts." A line was added to report crude oil movements.
- Table 29, "Net Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, and Barge Between PAD Districts." The crude oil line includes net movements by pipeline as well as by tanker and barge.

## Note 16: 1986 Changes in Petroleum Industry Reporting

Beginning in January 1986, several changes to the Petroleum Supply Reporting System (PSRS) went into effect. These changes affected the frame of operators of petroleum facilities required to complete the monthly surveys in the PSRS and resulted in some changes to the tables presented in the *Petroleum Supply Monthly* (PSM).

### Changes in Survey Frames

As a result of frames maintenance activities, 39 respondents were added to the monthly survey frames. The following table shows the impact of the data reported by the new respondents on published data for production and stocks of major petroleum products.

## Table B6. Impact of New Respondents to December 1985 PSM Data

| | Refinery Production (thousand barrels per day) | | Stocks[1] (thousand barrels) | |
|---|---|---|---|---|
| Product | Reported by New Respondents | Published U.S. Total | Reported by New Respondents | Published U.S. Total |
| Leaded Gasoline | 1.3 | 2,326 | 224 | 81,379 |
| Unleaded Gasoline | 0.6 | 4,323 | 276 | 108,422 |
| Distillate Fuel Oil | 0 | 3,174 | 1,217 | 143,911 |
| Residual Fuel Oil | 0 | 1,055 | 1,747 | 50,671 |
| NGL's & LRG's | 0 | 393 | 409 | 80,898 |
| Other Products | 0 | 3,302 | 1,413 | 239,158 |
| Crude Oil (excl. SPR) | -- | -- | 2,314 | 318,695 |

[1] Stocks as of December 31, 1985.

Also, beginning in January 1986, a major integrated petroleum company consolidated production and stocks reporting for some of its facilities. Data previously reported separately on Form EIA-811, *Monthly Bulk Terminal Report*, and on Form EIA-816, *Monthly Natural Gas Liquids Report* for two facilities have been combined with data reported for two refineries on Form EIA-810, *Monthly Refinery Report*. The primary impact of this reporting change is on Table 24, "Stocks of Crude Oil and Petroleum Products by PAD District," which will show a decrease in natural gas liquids (NGL) stocks at bulk terminals and natural gas processing plants, and an increase in NGL stocks at refineries.

### Changes in Publication Tables

Several changes have been made to tables in the PSM either as a direct result of changes in reporting requirements or to improve the usefulness of the publication. These changes are:

- Table 13, "Refinery Input of Crude Oil and Petroleum Products by PAD District"

  - Alaskan crude oil receipts are now shown separately.

- Table 14, "Refinery Production of Petroleum Products by PAD District"

  - The "petrochemical feedstock use" and "other use" are no longer shown separately for still gas or for liquefied refinery gases.

- Tables 16 and 17, "Imports of Crude Oil and Petroleum Products by PAD District"

  - Imports of unfinished oils are now separated into four categories: naphthas and lighter, kerosene and light gas oils, heavy gas oils, and residuum.

- Tables 18 and 19, "Imports of Crude Oil and Petroleum Products by Source"

  - Countries formerly included in the categories "Other Western Hemisphere" and "Other Eastern Hemisphere" are shown individually.

- Table 24, "Stocks of Crude Oil and Petroleum Products by PAD District"

  - The breakout between "petrochemical feedstock use" and "other use" for each liquefied petroleum gas was eliminated.

## Note 17: 1987 Changes in the Petroleum Supply Reporting System

Several changes to the Petroleum Supply Reporting System went into effect at the beginning of January 1987. These changes were made as part of the Energy Information Administration's (EIA's) continuing effort to provide pertinent, timely and consistent energy information.

### Changes in Data Collection and Reporting Systems

- Fresh feed input to catalytic cracking units, hydrocracking units and cokers were added to the Form EIA-810, *Monthly Refinery Report*.

### Changes in Publications

- The "Appalachian No. 2" Refining District has been combined with the "Indiana, Illinois, Kentucky," Refining District. This affects PSM Tables 12-15, 24, 30, and 31.

- Fresh feed inputs to catalytic cracking units, hydrocracking units and cokers are included in Table 13, "Refinery Input of Crude Oil and Petroleum Products by PAD District."

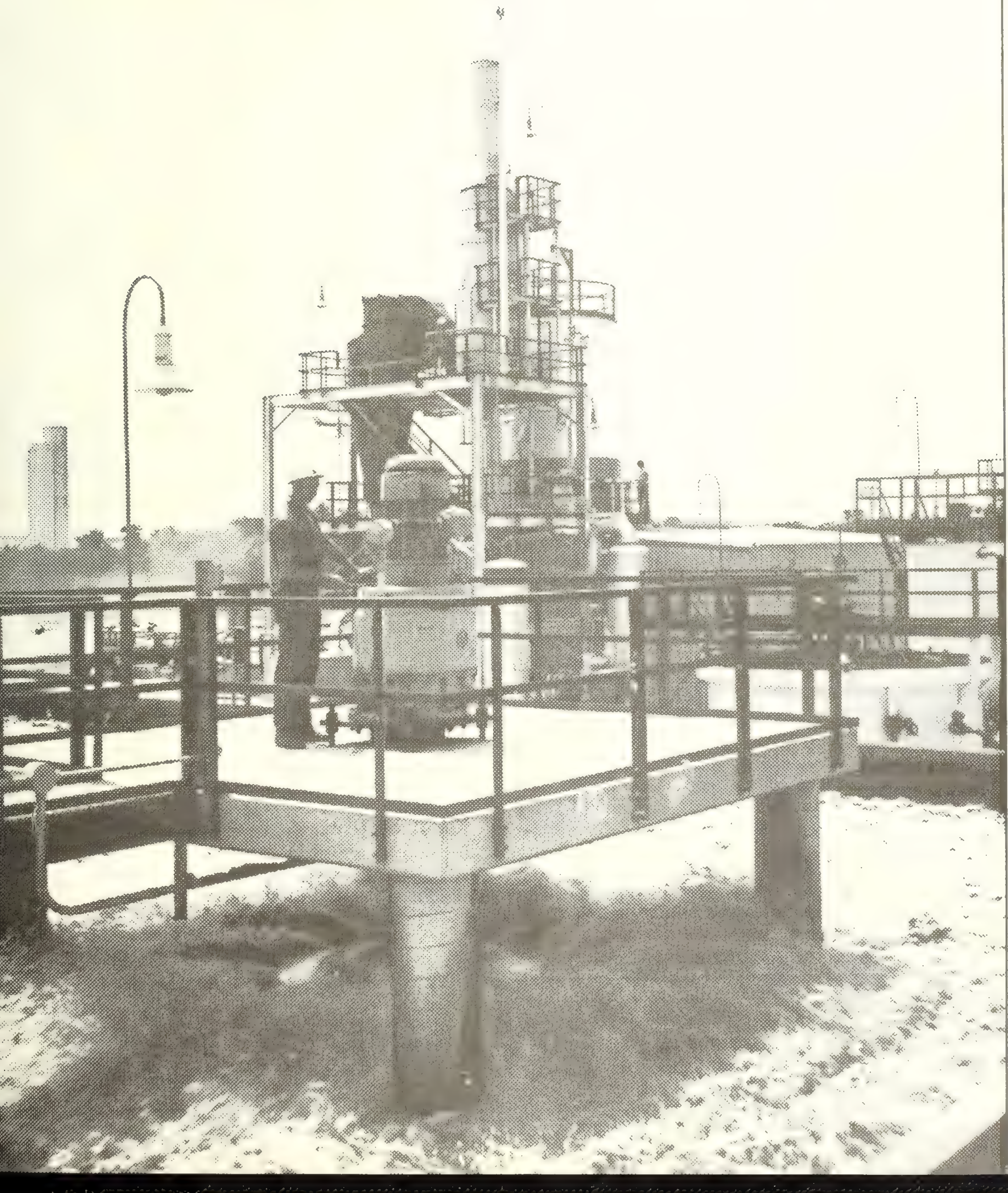
### larification

1986, several refineries and terminals in the United States pplied for Foreign Trade Zone (FTZ) status and applications om three refineries were approved. Consequently, during 1986, some refineries with FTZ status were treated as if they were within the United States while the Hawaiian FTZ was considered outside.

- Effective with the January 1987 data, all Foreign Trade Zone facilities located within the 50 United States are considered domestic entities and are included in statistics in the PSM. The principal differences in the PSM data series are about a 1 percent increase in crude oil imports and a 3 percent decrease in product imports.

# Appendix C

## Impact of Resubmissions on Major Series, 1988



## Table C1. Impact of Resubmissions on Major Series, 1988
(Thousand Barrels per Day, Except Where Noted)

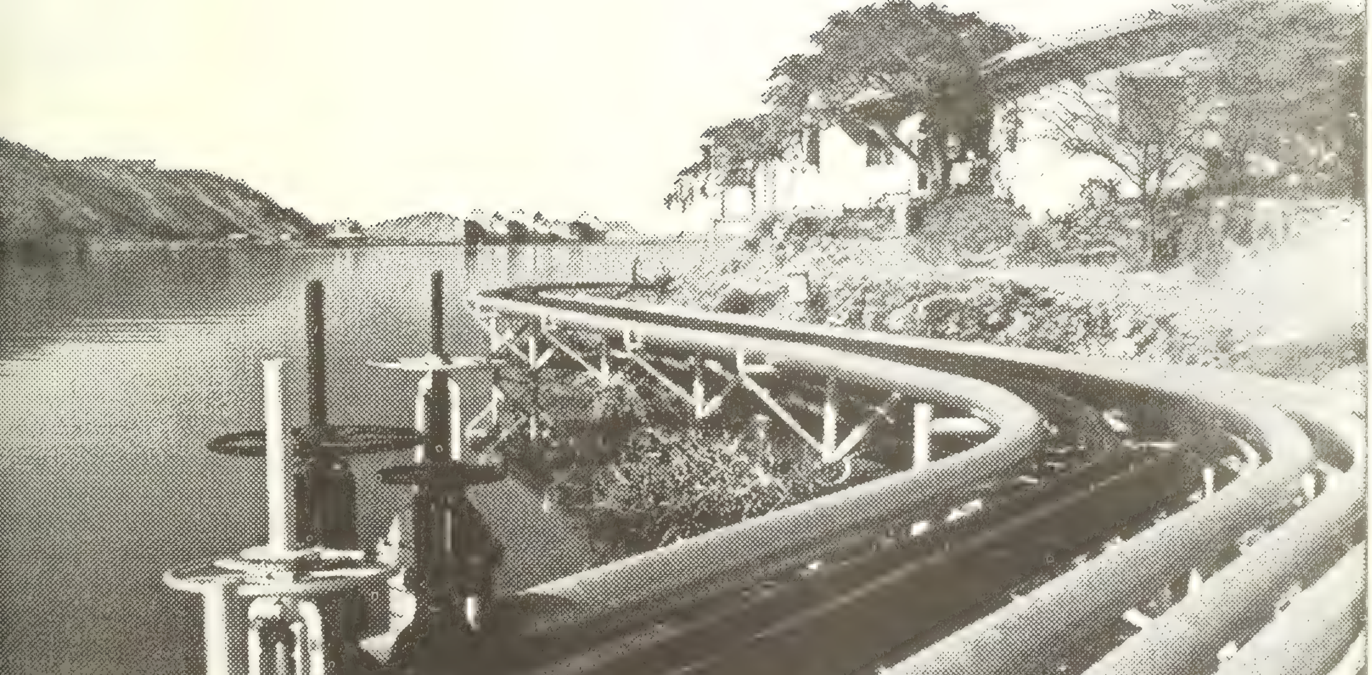
| | January | | February | | March | | April | | May | | June | | Year to Date |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Product | PSM Value | Difference | PSM Value | Difference | PSM Value | Difference | PSM Value | Difference | PSM Value | Difference | PSM Value | Difference | Average Difference |
| **nputs** | | | | | | | | | | | | | |
| Crude Oil | 12,975 | (s) | 12,715 | -20 | 13,072 | 8 | 13,167 | 0 | 13,472 | (s) | 13,528 | (s) | -1 |
| LPG's | 366 | -8 | 336 | 7 | 266 | 2 | 256 | 1 | 253 | 2 | 234 | (s) | 0 |
| **roduction** | | | | | | | | | | | | | |
| LPG's | 1,723 | 6 | 1,757 | 9 | 1,802 | 12 | 1,796 | 8 | 1,809 | 3 | 1,804 | 5 | 7 |
| Finished Motor Gasoline | 6,723 | 7 | 6,736 | (s) | 6,695 | 20 | 6,906 | 1 | 6,847 | 3 | 6,983 | 0 | 5 |
| Naphtha-Type Jet Fuel | 184 | (s) | 178 | (s) | 209 | 2 | 203 | 0 | 229 | (s) | 208 | 0 | (s) |
| Kerosene-Type Jet Fuel | 1,231 | 1 | 1,205 | 1 | 1,243 | 0 | 1,088 | 0 | 1,060 | 0 | 1,133 | 0 | (s) |
| Kerosene | 104 | 0 | 118 | (s) | 68 | (s) | 50 | 0 | 48 | 0 | 55 | 0 | (s) |
| Distillate Fuel Oil | 3,008 | (s) | 2,683 | -9 | 2,720 | -10 | 2,869 | (s) | 2,931 | (s) | 2,893 | (s) | -3 |
| Residual Fuel Oil | 1,009 | (s) | 997 | -6 | 944 | (s) | 951 | -3 | 866 | (s) | 881 | (s) | -1 |
| **mports** | | | | | | | | | | | | | |
| Crude Oil | 4,619 | 50 | 4,692 | 27 | 4,788 | 96 | 5,126 | 15 | 5,234 | 36 | 5,055 | 48 | 45 |
| Finished Motor Gasoline | 324 | 0 | 365 | 13 | 318 | 0 | 349 | 0 | 415 | 0 | 424 | 0 | 2 |
| Naphtha-Type Jet Fuel | 3 | 0 | 3 | 0 | 2 | 0 | 3 | 0 | 4 | 0 | 3 | 0 | 0 |
| Kerosene-Type Jet Fuel | 80 | 0 | 64 | 4 | 95 | 0 | 83 | -2 | 101 | 3 | 71 | 4 | 1 |
| Distillate Fuel Oil | 355 | 7 | 330 | 8 | 243 | -2 | 208 | (s) | 228 | 7 | 209 | 7 | 4 |
| Residual Fuel Oil | 737 | 22 | 792 | 30 | 610 | 14 | 465 | 9 | 423 | 11 | 349 | -27 | 9 |
| Other Products | 556 | 3 | 503 | 6 | 506 | 15 | 611 | 11 | 647 | 1 | 629 | 16 | 8 |
| tocks (Thousand Barrels) | | | | | | | | | | | | | |
| Crude Oil | 345,479 | 133 | 347,835 | 123 | 353,625 | 131 | 357,131 | 17 | 357,724 | 1,599 | 359,001 | -195 | 301 |
| Unfinished Oils | 95,338 | 0 | 97,786 | 41 | 102,134 | 4 | 102,847 | 0 | 112,069 | -2 | 114,952 | 0 | 7 |
| LPG's | 80,741 | -1,230 | 70,191 | 255 | 68,808 | 170 | 79,671 | 38 | 89,992 | 85 | 99,988 | 84 | -99 |
| Total Motor Gasoline | 239,464 | 418 | 240,661 | -59 | 231,258 | -929 | 225,956 | 262 | 225,644 | 0 | 208,969 | -33 | -56 |
| Naphtha-Type Jet Fuel | 8,366 | -760 | 6,731 | -681 | 7,156 | -524 | 6,713 | -441 | 7,397 | -568 | 6,750 | -13 | -497 |
| Kerosene-Type Jet Fuel | 37,912 | 24 | 36,889 | 24 | 39,548 | -47 | 39,270 | -2 | 39,392 | 86 | 38,990 | 31 | 19 |
| Distillate Fuel Oil | 127,155 | 286 | 109,640 | -22 | 89,312 | -379 | 94,290 | -176 | 104,452 | -463 | 110,662 | -456 | -201 |
| Residual Fuel Oil | 46,628 | -56 | 45,465 | -63 | 44,057 | 4 | 43,245 | -77 | 45,746 | 591 | 42,123 | -2 | 66 |
| **roduct Supplied** | | | | | | | | | | | | | |
| LPG's | 2,069 | 53 | 1,982 | -51 | 1,710 | 12 | 1,339 | 12 | 1,350 | -1 | 1,343 | 5 | 5 |
| Finished Motor Gasoline | 6,679 | -4 | 7,004 | 29 | 7,265 | 48 | 7,384 | -35 | 7,269 | 11 | 7,838 | -3 | 7 |
| Naphtha-Type Jet Fuel | 173 | 25 | 237 | -3 | 197 | -3 | 221 | -3 | 208 | 4 | 233 | -19 | (s) |
| Kerosene-Type Jet Fuel | 1,360 | (s) | 1,270 | 5 | 1,200 | 2 | 1,167 | -4 | 1,153 | (s) | 1,202 | 6 | 1 |
| Distillate Fuel Oil | 3,517 | -2 | 3,511 | 10 | 3,544 | (s) | 2,870 | -7 | 2,757 | 16 | 2,820 | 7 | 4 |
| Residual Fuel Oil | 1,578 | 24 | 1,601 | 25 | 1,434 | 11 | 1,272 | 9 | 945 | -11 | 1,102 | -8 | 8 |
| Major Products Supplied | 15,376 | 95 | 15,605 | 15 | 15,350 | 71 | 14,253 | -27 | 13,682 | 20 | 14,538 | -11 | 27 |

Note: Volumes indicate cumulative changes resulting from resubmissions received for that month as of the date of this publication.
(s) = Less than 500 barrels per day.

This table contains information on revisions to published statistics caused by resubmission of respondent survey forms. The table shows the published value in the *Petroleum Supply Monthly* (PSM) and the cumulative difference resulting from resubmissions for the major product series. The official published petroleum supply statistics are not changed to reflect revisions until publication of the *Petroleum Supply Annual* (PSA), except in cases of catastrophic error.

This table is provided as a service to analysts who need to know the latest available statistics. It should be used with caution because resubmissions are received on an irregular basis and the impact on published data can change from month to month. In some cases, the pattern of revision caused by resubmissions during the year is a poor indicator of final statistics that will be published in the PSA.

# Glossary



# Definitions of Petroleum Products and Other Terms

*lcohol.* The family name of a group of organic chemical
ompounds composed of carbon, hydrogen, and oxygen.
he series of molecules vary in chain length and are com-
osed of a hydrocarbon plus a hydroxyl group; CH-(CH)n-
H (e.g., methanol, ethanol, and tertiary butyl alcohol
TBA)).

*lkylation.* A refining process for chemically combining
obutane with olefin hydrocarbons (e.g., propylene, buty-
ne) through the control of temperature and pressure in the
resence of an acid catalyst, usually sulfuric acid or hy-
rofluoric acid. The product, alkylate, an isoparaffin, has
igh octane value and is blended with motor and aviation
asoline to improve the antiknock value of the fuel.

*PI Gravity.* An arbitrary scale expressing the gravity or
ensity of liquid petroleum products. The measuring scale
calibrated in terms of degrees API; it may be calculated in
rms of the following formula:

$$\text{Degrees API} = \frac{141.5}{sp.gr.60^\circ F/60^\circ F} - 131.5$$

*romatics.* Hydrocarbons characterized by unsaturated
ng structures of carbon atoms. Commercial petroleum
omatics are benzene, toluene, and xylene (BTX).

*sphalt.* A dark-brown-to-black cement-like material con-
ining bitumens as the predominant constituents, obtained
y petroleum processing. The definition includes crude
sphalt as well as the following finished products: cements,
uxes, the asphalt content of emulsions (exclusive of water),
d petroleum distillates blended with asphalt to make cut-
ack asphalts. The conversion factor for asphalt is 5.5
arrels of 42 U.S. gallons per short ton.

*STM.* The acronym for the American Society for Testing
d Materials.

*viation Gasoline (Finished).* All special grades of gaso-
ne for use in aviation reciprocating engines, as given in
STM Specification D910 and Military Specification MIL-
-5572. Excludes blending components which will be used
blending or compounding into finished aviation gasoline.

*Aviation Gasoline Blending Components.* Naphthas which will be used for blending or compounding into finished aviation gasoline (e.g., straight-run gasoline, alkylate, and reformate). Excludes oxygenates (alcohols, ethers), butane, and pentanes plus.

*Barrel.* A volumetric unit of measure for crude oil and petroleum products equivalent to 42 U.S. gallons. This measure is used in most statistical reports. Factors for converting petroleum coke, asphalt, still gas and wax to barrels are given in the definitions of these products.

*Barrels Per Calendar Day.* The maximum number of barrels of input that can be processed during a 24-hour period after making allowances for the following limitations:

> the capability of downstream facilities to absorb the output of crude oil processing facilities of a given refinery. No reduction is made when a planned distribution of intermediate streams through other than downstream facilities is part of a refinery's normal operation;
>
> the types and grades of inputs to be processed;
>
> the types and grades of products expected to be manufactured;
>
> the environmental constraints associated with refinery operations;
>
> the reduction of capacity for scheduled downtime such as routine inspection, mechanical problems, maintenance, repairs, and turnaround; and
>
> the reduction of capacity for unscheduled downtime such as mechanical problems, repairs, and slowdowns.

*Barrels Per Stream Day.* The amount a unit can process running at full capacity under optimal crude oil and product slate conditions.

*Benzene.* An aromatic hydrocarbon, (C6H6), present to a minor degree in most crude oils. Some important products manufactured from benzene are: styrene, phenol, nylon, aniline, and synthetic detergents.

***Butane.*** A normally gaseous straight-chain or branch-chain hydrocarbon, ($C_4H_{10}$). It is extracted from natural gas or refinery gas streams. It includes isobutane and normal butane and is designated in ASTM Specification D1835 and Gas Processors Association Specifications for commercial butane.

> ***Isobutane.*** A normally gaseous branch-chain hydrocarbon, ($C_4H_{10}$). It is a colorless paraffinic gas that boils at a temperature of 10.9 degrees F. It is extracted from natural gas or refinery gas streams.
>
> ***Normal Butane.*** A normally gaseous straight-chain hydrocarbon, ($C_4H_{10}$). It is a colorless paraffinic gas that boils at a temperature of 31.1 degrees F. It is extracted from natural gas or refinery gas streams.

***Butylene.*** An olefinic hydrocarbon, ($C_4H_8$), recovered from refinery processes.

***Catalytic Cracking.*** The refining process of breaking down the larger, heavier, and more complex hydrocarbon molecules into simpler and lighter molecules. Catalytic cracking is accomplished by the use of a catalytic agent and is an effective process for increasing the yield of gasoline from crude oil. Catalytic cracking processes fresh feeds and recycled feeds.

> ***Fresh Feeds.*** Crude oil or petroleum distillates which are being fed to processing units for the first time.
>
> ***Recycled Feeds.*** Feeds that are continuously fed back for additional processing.

***Catalytic Hydrocracking.*** A refining process that uses hydrogen and catalysts with relatively low temperatures and high pressures for converting middle boiling or residual material to high-octane gasoline, reformer charge stock, jet fuel and/or high grade fuel oil. The process uses one or more catalysts, depending upon product output, and can handle high sulfur feedstocks without prior desulfurization.

***Catalytic Hydrotreating.*** A refining process for treating petroleum fractions from atmospheric or vacuum distillation units (e.g., naphthas, middle distillates, reformer feeds, residual fuel oil, and heavy gas oil) and other petroleum (e.g., cat cracked naphtha, coker naphtha, gas oil, etc.) in the presence of catalysts and substantial quantities of hydrogen. Hydrotreating includes desulfurization, removal of substances (e.g., nitrogen compounds) that deactivate catalysts, conversion of olefins to paraffins to reduce gum formation in gasoline, and other processes to upgrade the quality of the fractions.

***Catalytic Reforming.*** A refining process using controlled heat and pressure with catalysts to rearrange certain hydrocarbon molecules, thereby converting paraffinic and naphthenic type hydrocarbons (e.g., low-octane gasoline boiling range fractions) into petrochemical feedstocks and higher octane stocks suitable for blending into finished gasoline. Catalytic reforming is reported in two categories. They are:

> ***Low Pressure.*** A processing unit operating at less than 225 pounds per square inch gauge (PSIG) measured at the outlet separator.
>
> ***High Pressure.*** A processing unit operating at either equal to or greater than 225 pounds per square inch gauge (PSIG) measured at the outlet separator.

***Charge Capacity.*** The input (feed) capacity of the refinery processing facilities.

***Coal.*** A generic term applied to carbonaceous rocks that were formed by the partial or complete decomposition of vegetation. These stratified carbonaceous rocks are either solid or brittle and are highly combustible. Includes lignite, bituminous coal, and anthracite which conform to ASTM Specification D388.

***Crude Distillation.*** The refining process of separating crude oil components at atmospheric pressure by heating to temperatures of about 600 degrees F to 750 degrees F (depending on the nature of the crude oil and desired products) and subsequent condensing of the fractions by cooling.

***Crude Oil (including Lease Condensate).*** A mixture of hydrocarbons that existed in liquid phase in underground reservoirs and remains liquid at atmospheric pressure after passing through surface-separating facilities. Included are lease condensate and liquid hydrocarbons produced from tar sands, gilsonite, and oil shale. Drip gases are also included, but topped crude oil (residual oil) and other unfinished oils are excluded. Liquids produced at natural gas processing plants and mixed with crude oil are likewise excluded where identifiable. Crude oil is considered as either domestic or foreign, according to the following:

> ***Domestic.*** Crude oil produced in the United States or from its "outer continental shelf" as defined in 43 USC 1331.
>
> ***Foreign.*** Crude oil produced outside the United States. Imported Athabasca hydrocarbons are included.

***elayed Coking.*** A process by which heavier crude oil actions can be thermally decomposed under conditions of evated temperatures and pressure to produce a mixture of ghter oils and petroleum coke. The light oils can be proc- sed further in other refinery units to meet product specifi- tions. The coke can be used either as a fuel or in other ap- ications such as the manufacturing of steel or aluminum.

***istillate Fuel Oil.*** A general classification for one of the troleum fractions produced in conventional distillation erations. It is used primarily for space heating, on-and- f-highway diesel engine fuel including railroad engine el and fuel for agricultural machinery), and electric power neration. Included are products known as No. 1, No. 2, d No. 4 fuel oils; No. 1, No. 2, and No. 4 diesel fuels.

***No. 1 Fuel Oil*** . A light distillate fuel oil intended for use in vaporizing pot-type burners. ASTM Specification D396 specifies for this grade maximum distillation temperatures of 400 degrees F at the 10-percent recovery point and 550 degrees F at the 90-percent point, and kinematic viscosities between 1.4 and 2.2 centistokes at 100 degrees F.

***No. 2 Fuel Oil.*** A distillate fuel oil for use in atomizing-type burners for domestic heating or for moderate capacity commercial-industrial burner units. ASTM Specification D396 designates minimum and maximum distillation temperatures at the 90-percent recovery point of 540 degrees F and 640 degrees F, and kinematic viscosities between 2.0 and 3.6 centistokes at 100 degrees F.

***No. 1 and No. 2 Diesel Fuel Oils.*** Distillate fuel oils used in compression-ignition engines, as designated in the ASTM Specification D975:

***No. 1-D.*** A volatile distillate fuel oil with a maximum distillation temperature of 550 degrees F at the 90-percent recovery point for use in high-speed diesel engines generally operated under variations in speed and load. Includes type C-B diesel fuel used for city buses and similar operations. Properties are defined in ASTM Specification D975.

***No. 2-D.*** A gas oil type distillate of lower volatility with minimum and maximum distillation temperatures at the 90-percent recovery point of 540 and 640 degrees F for use in high-speed diesel engines generally operated under uniform speed and load conditions. Includes Type R-R diesel fuel used for railroad locomotive engines, and Type T-T for diesel-engine trucks. Properties are defined in ASTM Specification D975.

***No. 4 Fuel Oil.*** A fuel oil for commercial burner installations not equipped with preheating facilities. It is used extensively in industrial plants. This grade is a blend of distillate fuel oil and residual fuel oil stocks that conforms to ASTM Specification D396 or Federal Specification VV-F-815C; with minimum and maximum kinematic viscosities between 5.8 and 26.4 centistokes at 100 degrees F. Also included is No. 4-D, a fuel oil for low and medium-speed diesel engines that conforms to ASTM Specification D975.

***Eastern Hemisphere.*** That half of the earth east of the Atlantic Ocean which includes Europe, Asia, Africa and Australia. The Hawaiian Foreign Trade Zone is in this hemisphere.

***Electricity (Purchased).*** Electricity purchased for refinery operations that is not produced within the refinery complex.

***Ethane.*** A normally gaseous straight-chain hydrocarbon, (C2H6). It is a colorless paraffinic gas that boils at a temperature of -127.48 degrees F. It is extracted from natural gas and refinery gas streams.

***Ether.*** A generic term applied to a group of organic chemical compounds composed of carbon, hydrogen, and oxygen, characterized by an oxygen atom attached to two carbon atoms (e.g., methyl tertiary butyl ether).

***Ethylene.*** An olefinic hydrocarbon, (C2H4), recovered from refinery processes or petrochemical processes.

***Exports.*** Shipments of goods from the 50 States and the District of Columbia to foreign countries, Puerto Rico, the Virgin Islands and other U.S. possessions and territories.

***Field Production.*** Represents crude oil production on leases, natural gas liquids production at natural gas processing plants, and new supply of other hydrocarbons and alcohol.

***Flexicoking.*** A thermal cracking process which converts heavy hydrocarbons such as crude oil, tar sands bitumen, and distillation residues into light hydrocarbons. Feedstocks can be any pumpable hydrocarbons including those containing high concentrations of sulfur and metals.

***Fluid Coking.*** A thermal cracking process utilizing the fluidized-solids technique to remove carbon (coke) for continuous conversion of heavy, low-grade oils into lighter products.

***Fuels Solvent Deasphalting.*** A refining process for removing asphalt compounds from petroleum fractions, such as reduced crude oil. The recovered stream from this process is used to produce fuel products.

***Gas Oil.*** A liquid petroleum distillate having a viscosity intermediate between that of kerosene and lubricating oil. It derives its name from having originally been used in the manufacture of illuminating gas. It is now used to produce distillate fuel oils and gasoline.

***Gasohol. See Motor Gasoline (Finished).***

***Gasoline Blending Components.*** Naphthas which will be used for blending or compounding into finished aviation or motor gasoline (e.g., straight-run gasoline, alkylate, and reformate). Excludes oxygenates (alcohols, ethers), butane, and pentanes plus.

***Heavy Gas Oil.*** Petroleum distillates with an approximate boiling range from 651 degrees F to 1000 degrees F.

***Hydrogen.*** The lightest of all gases, occurring chiefly in combination with oxygen in water; also in acids, bases, alcohols, petroleum, and other hydrocarbons.

***Idle Capacity.*** The component of operable capacity that is not in operation and not under active repair, but capable of being placed in operation within 30 days; and capacity not in operation but under active repair that can be completed within 90 days.

***Imported Crude Oil Burned As Fuel.*** The amount of foreign crude oil burned as a fuel oil, usually as residual fuel oil, without being processed as such. Imported crude oil burned as fuel includes lease condensate and liquid hydrocarbons produced from tar sand oil, gilsonite, and shale oil.

***Imports.*** Receipts of goods into the 50 States and the District of Columbia from foreign countries, Puerto Rico, the Virgin Islands, and other U.S. possessions and territories.

***Isobutane. See Butane.***

***Isohexane.*** A saturated branch-chain hydrocarbon, ($C_6H_{14}$). It is a colorless liquid that boils at a temperature of 156.2 degrees F.

***Isomerization.*** A refining process which alters the fundamental arrangement of atoms in the molecule without adding or removing anything from the original material. Used to convert normal butane into isobutane, (C4), an alkylation process feedstock, and normal pentane and hexane into isopentane, (C5), and isohexane, (C6), high-octane gasoline components.

***Isopentane. See Natural Gasoline and Isopentane.***

***Kerosene.*** A petroleum distillate that has a maximum distillation temperature of 401 degrees F at the 10-percent recovery point, a final boiling point of 572 degrees F, and a minimum flash point of 100 degrees F. Included are the two grades designated in ASTM D3699: No. 1-K and No. 2-K, and all grades of kerosene called range or stove oil. Kerosene is used in space heaters, cook stoves, and water heaters and is suitable for use as an illuminant when burned in wick lamps.

***Kerosene-type Jet Fuel.*** A quality kerosene product with a maximum distillation temperature of 400 degrees F at the 10-percent recovery point and a final maximum boiling point of 572 degrees F. The fuel is designated in ASTM Specification D1655 and Military Specification MIL-T-5624L (Grades JP-5 and JP-8). A relatively low-freezing point distillate of the kerosene type used primarily for commercial turbojet and turboprop aircraft engines.

***Lease Condensate.*** A natural gas liquid recovered from gas well gas (associated and non-associated) in lease separators or natural gas field facilities. Lease condensate consists primarily of pentanes and heavier hydrocarbons.

***Light Gas Oils.*** Liquid petroleum distillates heavier than naphtha, with an approximate boiling range from 401 degrees F to 650 degrees F.

***Liquefied Petroleum Gases (LPG).*** Ethane, ethylene, propane, propylene, normal butane, butylene, and isobutane produced at refineries or natural gas processing plants, including plants that fractionate raw natural gas plant liquids.

***Liquefied Refinery Gases (LRG).*** Liquefied petroleum gases fractionated from refinery or still gases. Through compression and/or refrigeration, they are retained in the liquid state. The reported categories are ethane/ethylene, propane/propylene, normal butane butylene, and isobutane. Excludes still gas.

***Lubricating Oils.*** A substance used to reduce friction between bearing surfaces. Petroleum lubricants may be produced either from distillates or residues. Other substances may be added to impart or improve certain required properties. Do not include byproducts of lubricating oil refining such as aromatic extracts derived from solvent extraction or tars derived from deasphalting. "Lubricants"

cludes all grades of lubricating oils from spindle oil to linder oil and those used in greases. The three categories clude:

***Bright Stock.*** A refined, high viscosity lubricating oil base stock that is usually made from a residuum by a treatment such as deasphalting, acid treatment, or solvent extraction.

***Neutral.*** A distillate lubricating oil base stock with a viscosity that is usually not above 550 Saybolt Universal Seconds (SUS) at 100 degrees F. A product of hydrotreating, acid treatment, or solvent extraction.

***Other.*** A lubricating oil base stock used in finished lubricating oils and greases, including black, coastal, and red oils.

***iddle Distillates.*** A general classification that includes stillate fuel oil and kerosene.

***iscellaneous Products.*** Includes all finished products not assified elsewhere (e.g., petrolatum, lube refining bypro- cts (aromatic extracts and tars), absorption oils, ram-jet el, petroleum rocket fuels, synthetic natural gas feed- ocks, speciality oils, and medicinal oils).

***otor Gasoline (Finished).*** A complex mixture of rela- ely volatile hydrocarbons, with or without small quanti- s of additives, that have been blended to form a fuel itable for use in spark-ignition engines. Motor gasoline, as ven in ASTM Specification D439 or Federal Specification V-G-1690B, include a range in distillation temperatures om 122 to 158 degrees F at the 10-percent recovery point d from 365 to 374 degrees F at the 90-percent recovery int. The Reid Vapor Pressure ranges from 9 to 15 psi. Iotor gasoline" includes finished leaded gasoline, fin- ned unleaded gasoline, and gasohol. Blendstock is ex- uded until blending has been completed. Alcohol that is to used in the blending of gasohol is also excluded.

***Finished Leaded Gasoline.*** Contains more than 0.05 gram of lead per gallon or more than 0.005 gram of phosphorus per gallon. Premium and regular grades are included, depending on the octane rating. Includes leaded gasohol. Blendstock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

***Finished Unleaded Gasoline.*** Contains not more than 0.05 gram of lead per gallon and not more than 0.005 gram of phosphorus per gallon. Premium and regular grades are included, depending on the octane rating. Includes unleaded gasohol. Blendstock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

***Gasohol.*** A blend of finished motor gasoline (leaded or unleaded) and alcohol (generally ethanol but sometimes methanol), limited to 10 percent by volume of alcohol.

***Motor Gasoline Blending Components.*** Naphthas which will be used for blending or compounding into finished motor gasoline (e.g. straight-run gasoline, alkylate, and reformate). Excludes oxygenates (alcohols, ethers), butane, and pentanes plus.

***Naphtha.*** A generic term applied to a petroleum fraction with an approximate boiling range between 122 and 400 degrees F.

***Naphtha-type Jet Fuel.*** A fuel in the heavy naphtha boiling range. ASTM Specification D1655 specifies for this fuel maximum distillation temperatures of 290 degrees F at the 20-percent recovery point and 470 degrees F at the 90-percent point, meeting Military Specification MIL-T-5624L (Grade JP-4). JP-4 is used for turbojet and turboprop aircraft engines, primarily by the military. Excludes ram-jet and petroleum rocket fuels.

***Natural Gas.*** A mixture of hydrocarbons and small quantities of various nonhydrocarbons existing in the gaseous phase or in solution with crude oil in underground reservoirs.

***Natural Gas Field Facility.*** A field facility designed to process natural gas produced from more than one lease for the purpose of recovering condensate from a stream of natural gas; however, some field facilities are designed to recover propane, normal butane, pentanes plus, etc., and to control the quality of natural gas to be marketed.

***Natural Gas Plant Liquids.*** Natural gas liquids recovered from natural gas in gas processing plants, and in some situations, from natural gas field facilities. Natural gas liquids extracted by fractionators are also included. These liquids are defined according to the published specifications of the Gas Processors Association and the American Society for Testing and Materials and are classified as follows: ethane, propane, normal butane, isobutane, pentanes plus, and other products from natural gas processing plants (i.e., products meeting the standards for finished petroleum products produced at natural gas processing plants, such as finished motor gasoline, finished aviation gasoline, special naphthas, kerosene, distillate fuel oil, and miscellaneous products).

*Natural Gas Processing Plant.* A gas processing plant is a facility designed (1) to achieve the recovery of natural gas liquids from the stream of natural gas which may or may not have been processed through lease separators and field facilities, and (2) to control the quality of the natural gas to be marketed. Cycling plants are classified as gas processing plants.

*Natural Gasoline and Isopentane.* A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas, that meets vapor pressure, end-point, and other specifications for natural gasoline set by the Gas Processors Association. Includes isopentane which is a saturated branch-chain hydrocarbon, (C5H12), obtained by fractionation of natural gasoline or isomerization of normal pentane.

*Normal Butane. See Butane.*

*OPEC.* The acronym for the Organization of Petroleum Exporting Countries, that have organized for the purpose of negotiating with oil companies on matters of oil production, prices and future concession rights. Current members are Algeria, Ecuador, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela.

*Operable Capacity.* The amount of capacity that, at the beginning of the period, is in operation; not in operation and not under active repair, but capable of being placed in operation within 30 days; or not in operation but under active repair that can be completed within 90 days. Operable capacity is the sum of the operating and idle capacity and is measured in barrels per calendar day or barrels per stream day.

*Operating Capacity.* The component of operable capacity that is in operation at the beginning of the period.

*Other Hydrocarbons.* Materials received by a refinery and consumed as a raw material. Includes hydrogen, coal tar derivatives, gilsonite, and natural gas received by the refinery for reforming into hydrogen. Natural gas to be used as fuel is excluded.

*Oxygenates.* Oxygenates include both alcohols and ethers used as octane boosting additives for gasoline (e.g., methyl tertiary butyl ether).

*Pentanes Plus.* A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas. Includes isopentane, natural gasoline, and plant condensate.

*Petrochemical Feedstocks.* Chemical feedstocks derived from petroleum principally for the manufacture of chemicals, synthetic rubber, and a variety of plastics. The categories reported are "Naphtha-Less than 400 degrees F" and "Other oils over 400 degrees F."

> *Naphtha-Less Than 400 Degrees F.* A naphtha with a boiling range of less than 400 degrees F that is intended for use as a petrochemical feedstock.
>
> *Other Oils-Over 400 Degrees F.* Oils with a boiling range of over 400 degrees F that is intended for use as a petrochemical feedstock.

*Petroleum Coke.* A residue, the final product of the condensation process in cracking. This product is reported as marketable coke or catalyst coke. The conversion factor is 5 barrels of 42 U.S. gallons per short ton.

> *Marketable Coke.* Those grades of coke produced in delayed or fluid cokers which may be recovered as relatively pure carbon. This "green" coke may be sol as is or further purified by calcining.
>
> *Catalyst Coke.* In many catalytic operations (e.g. catalytic cracking) carbon is deposited on the catalyst thus deactivating the catalyst. The catalyst is reactivated by burning off the carbon, which is used as a fue in the refining process. This carbon or coke is no recoverable in a concentrated form.

*Petroleum Products.* Petroleum products are obtained fro the processing of crude oil (including lease condensate) natural gas, and other hydrocarbon compounds. Petroleu products include unfinished oils, liquefied petroleum gases pentanes plus, aviation gasoline, motor gasoline, naphtha type jet fuel, kerosene-type jet fuel, kerosene, distillate fue oil, residual fuel oil, petrochemical feedstocks, specia naphthas, lubricants, waxes, petroleum coke, asphalt, roa oil, still gas, and miscellaneous products.

*Plant Condensate.* One of the natural gas liquids, mostl pentanes and heavier hydrocarbons, recovered and separated as liquids at gas inlet separators or scrubbers in processing plants.

*Primary Stocks.* Stocks of crude oil or petroleum product held in storage at (or in) leases, refineries, natural ga processing plant pipelines, tankfarms, and bulk terminal that can store at least 50,000 barrels of petroleum product or that can receive petroleum products by tanker, barge, c pipeline. Crude oil that is in-transit by water from Alask or that is stored on Federal leases or in the Strategic Petroleum Reserve is included. Primary Stocks exclude stocks o foreign origin that are held in bonded warehouse storage.

*roduction Capacity.* The amount of product that can be roduced from processing facilities.

*ropane.* A normally gaseous straight-chain hydrocarbon, C3H8). It is a colorless paraffinic gas that boils at a temerature of -43.67 degrees F. It is extracted from natural gas r refinery gas streams. It includes all products designated ASTM Specification D1835 and Gas Processors Associaon Specifications for commercial propane and HD-5 proane.

*ropylene.* An olefinic hydrocarbon, (C3H6), recovered om refinery processes or petrochemical processes.

*efinery.* An installation that manufactures finished petroum products from crude oil, unfinished oils, natural gas quids, other hydrocarbons, and alcohol.

*esidual Fuel Oil.* The topped crude of refinery operations hich includes No. 5 and No. 6 fuel oils as defined in ASTM pecification D396 and Federal Specification VV-F-815C, avy Special fuel oil as defined in Military Specification IIL-F-859E including Amendment 2 (NATO Symbol F-7), and Bunker C fuel oil. Residual fuel oil is used for the roduction of electric power, space heating, vessel bunkerg, and various industrial purposes. Imports of residual fuel il include "Imported Crude Oil Burned as Fuel."

*esiduum.* Residue from crude oil after distilling off all but e heaviest components, with a boiling range greater than 000 degrees F.

*oad Oil.* Any heavy petroleum oil, including residual sphaltic oil used as a dust pallative and surface treatment on oads and highways. It is generally produced in six grades om 0, the most liquid, to 5, the most viscous.

*hell Storage Capacity.* The design capacity of a petroleum orage tank and is always greater than or equal to working orage capacity.

*pecial Naphthas.* All finished products within the naphtha oiling range that are used as paint thinners, cleaners, or olvents. These products are refined to a specified flash oint. Special naphthas include all commercial hexane and leaning solvents conforming to ASTM Specification 1836 and D484, respectively. Naphthas to be blended or arketed as motor gasoline or aviation gasoline, or that are be used as petrochemical and synthetic natural gas (SNG) edstocks are excluded.

*team (Purchased).* Steam, purchased for use by a refinery, at was not generated from within the refinery complex.

*Still Gas (Refinery Gas).* Any form or mixture of gases produced in refineries by distillation, cracking, reforming, and other processes. The principal constituents are methane, ethane, ethylene, normal butane, butylene, propane, propylene, etc. Still gas is used as a refinery fuel and a petrochemical feedstock. The conversion factor is 6.000 million Btu per barrel (42 U.S. gallons).

*Strategic Petroleum Reserve (SPR).* Petroleum stocks maintained by the Federal Government for use during periods of major supply interruption.

*Sulfur.* A nonmetallic element of lemon-yellow color, sometimes known as "brimstone."

*Thermal Cracking.* A refining process in which heat and pressure are used to break down, rearrange, or combine hydrocarbon molecules. Thermal cracking includes gas oil, visbreaking, fluid coking, delayed coking, and other thermal cracking processes (e.g., flexicoking). See individual categories for definition.

*Toluene.* An aromatic hydrocarbon, (C6H5CH3), somewhat similar to benzene but of a higher boiling point produced in the coking of coal and also by petroleum refining processes. It is the basis of dyes, explosives, and aromatic compounds. Along with xylene, it is a key component in unleaded gasoline.

*Unfinished Oils.* Includes all oils requiring further processing, except those requiring only mechanical blending. Includes naphthas, kerosene, light and heavy gas oils, and residuum. See individual categories for definition.

*Unfractionated Streams.* Mixtures of unsegregated natural gas liquid components excluding those in plant condensate. This product is extracted from natural gas.

*United States.* The United States is defined as the 50 States and the District of Columbia. U.S. exports include shipments to U.S. territories, and imports include receipts from U.S. territories.

*Vacuum Distillation.* Distillation under reduced pressure (less the atmospheric) which lowers the boiling temperature of the liquid being distilled. This technique with its relatively low temperatures prevents cracking or decomposition of the charge stock.

*Visbreaking.* A thermal process in which heavy atmospheric or vacuum-still bottoms are cracked at moderate temperatures to increase production of distillate products and reduce viscosity of the distillation residues.

***Wax.*** A solid or semi-solid material derived from petroleum distillates or residues by such treatments as chilling, precipitating with a solvent, or de-oiling. It is light-colored, more-or-less translucent crystalline mass, slightly greasy to the touch, consisting of a mixture of solid hydrocarbons in which the paraffin series predominates. Includes all marketable wax whether crude scale or fully refined. The three grades included are microcrystalline, crystalline-fully refined, and crystalline-other. The conversion factor is 280 pounds per 42 U.S. gallons per barrel.

***Microcrystalline Wax.*** Wax extracted from certain petroleum residues having a finer and less apparent crystalline structure than paraffin wax and having the following physical characteristics: Penetration at 77 degrees F (D1321)-60 maximum. Viscosity at 210 degrees F in Saybolt Universal Seconds (SUS). (D88)-60 SUS (10.22 centistokes) minimum to 150 SUS (31.8 centistokes) maximum. Oil content (D721)-5 percent minimum.

***Crystalline-Fully Refined Wax.*** A light-colored paraffin wax having the following characteristics: Viscosity at 210 degrees F (D88)-59.9 SUS (10.18 centistokes) maximum. Oil content (D721)-0.5 percent maximum. Other +20 color, Saybolt minimum.

***Crystalline-Other Wax.*** A paraffin wax having the following characteristics: Viscosity at 210 degrees F (D88)-59.9 SUS (10.18 centistokes) maximum. Oil content (D721)-0.51 percent minimum to 15 percent maximum.

***Western Hemishpere.*** That half of the earth that includes North and South America and adjacent islands.

***Working Storage Capacity.*** The volume between the maximum safe fill capacity and the quantity below which pump suction is ineffective (bottoms).

***Xylene.*** An aromatic hydrocarbon, (C6H4Y(CH3)2), produced in petroleum refining (cracking) processes. One important use is as a solvent in the manufacture of paints. Along with toluene, it is a key ingredient in unleaded gasoline.

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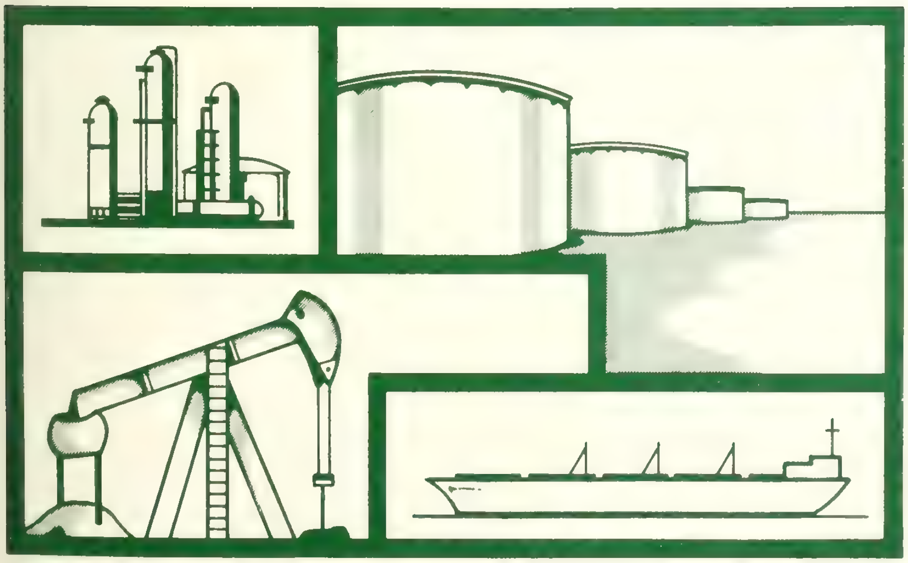
# Petroleum Supply Monthly

## September 1988



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Office of Oil and Gas
U.S. Department of Energy
Washington, DC 20585

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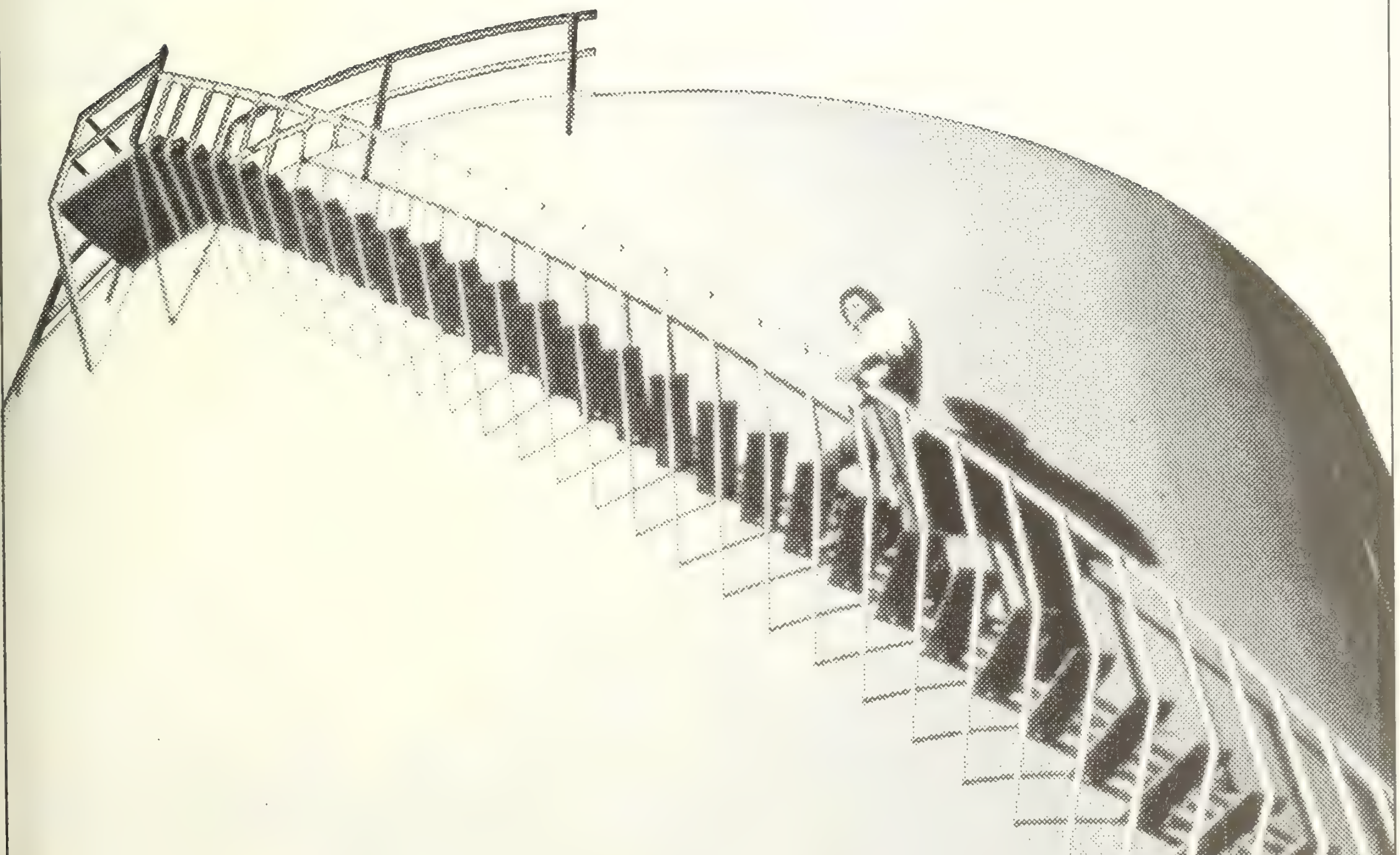
# Feature Article



# Comparisons of Independent Statistics on Petroleum Supply

*by Audrey E. J. Corley*

## Introduction

The mission of the Petroleum Supply Division (PSD) of the Energy Information Administration (EIA) is to collect information on petroleum supply and disposition in the United States. This information is collected through a series of surveys which make up the Petroleum Supply Reporting System (PSRS). The PSRS data are published in the *Weekly Petroleum Status Report, Petroleum Supply Monthly* (PSM), and *Petroleum Supply Annual* (PSA).

This article presents a comparison of PSA final statistics with similar petroleum statistics from other sources outside of the PSD. The data are for the years 1979 through 1987, except that product import data are only for 1986 and 1987. Adjustments have been made to some data series to rectify differences in coverage, definitions, and units of measure. Large differences between series may indicate problems with one or more of the data series. When the series are in close agreement, there is no indication of inaccuracy.

## Crude Oil Production

Crude oil production statistics from the PSA are compared with similar data from the American Petroleum Institute (API), the *Oil and Gas Journal* (OGJ) and EIA's Reserves and Natural Gas Division (RNGD) (Table FE1). The PSA statistics on crude oil production are based on data collected by State conservation agencies and the Minerals Management Service of the U.S. Department of Interior. Crude oil produced on Federally-owned offshore leases is reported by the U. S. Minerals Management Service. The 1987 API estimate of crude oil production is based on a sample survey which they conduct. Over 50 percent of the production volumes are reported by producing companies in this survey. Prior to 1987 these volumes were also based on data provided by State conservation agencies. For the past 9 years (1979 through 1987), the API crude oil production statistics were within 0.6 percent of the PSA volumes for every year except 1984. The API volumes for 1984 were 1.6 percent lower than the PSA volumes (Table FE1).

The OGJ estimates of weekly crude oil production are based on data from State conservation agencies and historical State production levels. In 1987, the OGJ statistics were 0.4 percent lower than the PSA statistics. For 6 out of the past 9 years the OGJ volumes were within 1.0 percent of the PSA volumes.

EIA's RNGD publishes the annual report, *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves.* This report presents crude oil production data from Form EIA-23, "Annual Survey of Domestic Oil and Gas Reserves." Survey forms are mailed to all known large and intermediate-sized operators, and to a sample of small operators. The RNGD and PSA statistics have been in close agreement over the 9-year period. In the majority of the years studied, the difference was less than 1.0 percent. In most years, RNGD volumes were lower; this was the case in the 1987 comparison.

## Crude Oil Imports

A major element in petroleum supply is imports. More crude oil than refined products is imported annually. The statistics on crude oil imports, published in the PSA, are reported on Form EIA-814, "Monthly Imports Report" by all known companies that import petroleum. The geographic coverage of the PSA is the 50 States and the District of Columbia. Imports into Puerto Rico, the Virgin Islands, and other U.S. possessions are excluded. The PSA statistics are compared with API and the U.S. Bureau of the Census (Census) statistics for crude oil imports (Table FE2).

The API crude oil imports data are collected on a weekly survey. Since the volumes do not include crude oil imported by the Strategic Petroleum Reserve (SPR), data from the PSA on volumes of crude oil imported for the SPR have been added to API data for comparison purposes. The volumes of crude oil imported have increased significantly in the past year; API reported an increase of approximately 196 million barrels. The PSA and Census volumes show an increase consistent with the API. The difference between PSA and API statistics for 1987 narrowed to 0.5 percent, with API volumes below those of the PSA.

The Census data on crude oil imports consist of information provided to the U.S. Customs Service as a requirement for entry into the United States. These data are filed on Form CF-7501, "Customs Entry Document," or Form CF-7505, "Warehouse Withdrawal Form." Processing, tabulation, and publication of the information on these forms are carried out by the

## Table FE1. Production of Crude Oil (Including Lease Condensate) - Comparison of Statistics

| | PSA | API | | OGJ | | RNGD | |
|---|---|---|---|---|---|---|---|
| Year | Million Barrels | Million Barrels | Percent of PSA | Million Barrels | Percent of PSA | Million Barrels | Percent of PSA |
| 1987 | 3,047 | 3,028 | 99.4 | 3,034 | 99.6 | 3,035 | 99.6 |
| 1986 | 3,168 | 3,182 | 100.4 | 3,195 | 100.9 | 3,142 | 99.2 |
| 1985 | 3,275 | 3,261 | 99.6 | 3,223 | 98.4 | 3,220 | 98.3 |
| 1984 | 3,250 | 3,197 | 98.4 | 3,173 | 97.6 | 3,216 | 99.0 |
| 1983 | 3,171 | 3,175 | 100.1 | 3,161 | 99.7 | 3,177 | 100.2 |
| 1982 | 3,157 | 3,164 | 100.2 | 3,156 | 100.0 | 3,107 | 98.4 |
| 1981 | 3,129 | 3,140 | 100.4 | 3,135 | 100.2 | 3,110 | 99.4 |
| 1980 | 3,146 | 3,160 | 100.4 | 3,147 | 100.0 | 3,134 | 99.6 |
| 1979 | 3,121 | 3,130 | 100.3 | 3,168 | 101.5 | 3,102 | 99.4 |

Sources: •PSA: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340, 1981 through 1987, Table 2; *Petroleum Statement Annual*, DOE/EIA-0108, 1979 and 1980, Table 6. •API: American Petroleum Institute, *Monthly Statistical Report*, 1979 through 1987. •OGJ: *Oil and Gas Journal*, 1979 through 1987. •RNGD: *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves Annual Report*, DOE/EIA-0216, Crude Oil, 1979 through 1987, Table 6 ; Lease Condensate, 1979 through 1984, Table 16, 1985, Table 14, and 1986 and 1987, Table 15.

## Table FE2. Crude Oil Imports - Comparison of Statistics

| | PSA | API[a] | | Census[b] | |
|---|---|---|---|---|---|
| Year | Million Barrels | Million Barrels | Percent of PSA | Million Barrels | Percent of PSA |
| 1987 | 1,706 | 1,697 | 99.5 | 1,627 | 95.4 |
| 1986 | 1,525 | 1,501 | 98.4 | 1,540 | 101.0 |
| 1985 | 1,168 | 1,164 | 99.7 | 1,170 | 100.2 |
| 1984 | 1,254 | 1,303 | 103.9 | 1,208 | 96.3 |
| 1983 | 1,215 | 1,232 | 101.4 | 1,199 | 98.7 |
| 1982 | 1,273 | 1,275 | 100.2 | 1,300 | 102.1 |
| 1981 | 1,605 | 1,617 | 100.7 | 1,635 | 101.9 |
| 1980 | 1,926 | 1,917 | 99.5 | 1,942 | 100.8 |
| 1979 | 2,380 | 2,346 | 98.6 | 2,415 | 101.5 |

Sources: • PSA: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340, 1981 through 1987, Table 2; *Petroleum Statement Annual*, DOE/EIA-0108, 1979 and 1980, Table 1; • API: American Petroleum Institute, *Monthly Statistical Report*. • Census: Bureau of the Census, FT-246, *Annual U.S. Imports for Consumption and General Imports: TSUSA*, IA-245X, *Annual U.S. Imports for Consumption and General Imports: TSUSA*, 1980 through 1985. IM-115 Data Tape, 1986 and 1987.

[a] API statistics include PSA statistics for crude oil imported for the Strategic Petroleum Reserve.

[b] Census statistics are adjusted to reflect the geographic coverage and reporting period of the PSA.

Census and provided to the EIA on a data tape. The geographic coverage and reporting period are inconsistent with the PSA and have been adjusted to reflect the PSA reporting periods and geographical area.[1] In 1987, the adjusted Census data were 4.6 percent lower than the PSA annual average; this is the largest discrepancy in the 9-year period. During 1987, some companies were reporting condensate to Census (through the Customs Entry Documents). This volume of condensate was over 53 million barrels. When these data are added to the crude oil data from the Census, the discrepancy between Census and PSA data decreased to 1.5 percent, with the PSA volume higher than that of the Census. There has been no consistent pattern from year to year in the ratio of Census volumes to PSA volumes.

## Product Supplied

Petroleum product supplied, as reported in the PSA, is estimated by summing field production, plus refinery production, plus imports, plus stock withdrawal or minus stock addition,

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[1] The PSA uses the import month as the reporting period; the Census Bureau uses the month the form was received as the "statistical month" reporting period. Therefore, there are times when Census Bureau import dates differ from the PSA dates for the same period.

## Table FE3. Motor Gasoline Supplied for Domestic Use - Comparison of Statistics

| | PSA | PMD | | API | | FHWA | |
|---|---|---|---|---|---|---|---|
| Year | Million Barrels | Million Barrels | Percent of PSA | Million Barrels | Percent of PSA | Million Barrels | Percent of PSA |
| 1987 | 2,630 | 2,760 | 104.9 | 2,611 | 99.3 | 2,677 | 101.8 |
| 1986 | 2,567 | 2,770 | 107.9 | 2,580 | 100.5 | 2,630 | 102.5 |
| 1985 | 2,493 | 2,691 | 107.9 | 2,476 | 99.3 | 2,553 | 102.4 |
| 1984 | 2,449 | 2,552 | 104.2 | 2,459 | 100.4 | 2,498 | 102.0 |
| 1983 | 2,417 | 2,495 | 103.2 | 2,420 | 100.1 | 2,434 | 100.7 |
| 1982 | 2,387 | 2,451 | 102.7 | 2,376 | 99.5 | 2,413 | 101.1 |
| 1981 | 2,404 | 2,431 | 101.1 | 2,379 | 99.0 | 2,446 | 101.7 |
| 1980 | 2,408 | 2,573 | 106.9 | 2,523 | 104.8 | 2,486 | 103.2 |
| 1979 | 2,568 | 2,749 | 107.0 | 2,579 | 100.4 | 2,649 | 103.2 |

Sources: • PSA: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340,1981 through 1987, Table 2; *Petroleum Statement Annual* DOE/EIA-0108, 1979 and 1980, Table 2. • PMD: Energy Information Administration, Form EIA-25, "Prime Suppliers Report", 1979 through 1982; Form EIA-782C, "Monthly Report of Petroleum Products Sold into States for Consumption," *Petroleum Marketing Monthly*, DOE/EIA-0380, 1983 through 1987. • API: American Petroleum Institute, *Monthly Statistical Report*, 1979 through 1987. • FHWA: Federal Highway Administration, *Highway Statistics*, 1979 through 1987, Tables MF-21A and MF-24.

minus crude oil losses, minus refinery input, minus exports. This measure indicates those quantities of petroleum products supplied for domestic use. The API follows the same general formula. Product supplied data are comparable to statistics from other sources with some adjustments, as will be described.

## Motor Gasoline Supplied

Table FE3 compares PSA statistics on motor gasoline supplied with data from the EIA's Petroleum Marketing Division (PMD), the American Petroleum Institute (API), and the Highway Statistics Division of the Federal Highway Administration (FHWA).

The PMD conducts a survey using Form EIA-782C, "Monthly Report of Petroleum Products Sold into States for Consumption." This survey is sent to all suppliers who make the "first sale" of selected products listed on this form, and who deliver that product into a State for consumption in that State. The annual data from this survey are published in the *Petroleum Marketing Annual*. Because the PMD collects data on " first sales" into a State for consumption, double counting may exist. For this reason, the PMD has created an 'Exclusionary List' which is provided to respondents. This list gives the names of other respondents who report on this survey form. Through the use of this list respondents avoid reporting volumes that have been reported by other respondents to the Form EIA-782C. The Form EIA-782C frame consists of all known refiners and gas plant operators and some large interstate resellers or distributors; approximately 231 firms report. In 1987, the PMD volume was 4.9 percent above the PSA volumes of motor gasoline. This is the smallest difference in the past 3 years. Even though the PMD has used the "Exclusionary List" for a number of years, in 1987 there was a concerted effort to enforce the use of the "Exclusionary List." This effort is reflected in the decreased discrepancy between sources.

The API *Monthly Statistical Report* contains information on crude oil and petroleum products for a specific month of the current year and for the same month of the previous year. The published motor gasoline statistics refer to motor gasoline delivered from primary storage (production, plus imports, plus or minus net stock change adjustment, minus exports). These statistics are based on a voluntary survey of importers of record and operators of refineries, bulk terminals, and pipelines, as well as a historical analysis of the industry. The 1987 API statistics are consistent with the preceding 6 years, where the difference between API and PSA volumes has remained within 1.0 percent.

The FHWA's *Highway Statistics* includes data on total gasoline usage. These statistics are based on gasoline sales volumes reported to State motor fuel tax agencies by wholesale distributors. The difference between PSA and FHWA statistics in 1987 was 1.8 percent, which is less than that of the previous 3 years. Over the 1979-through-1987 period the FHWA volumes have remained higher than PSA volumes.

## Distillate Fuel Oil Supplied

The two sources for comparative statistics on distillate fuel oil supplied are the API and the PMD (Table FE4). The PMD statistics for distillate fuel oil include kerosene. In order to accurately compare these data, the API and PSA distillate statistics also include kerosene supplied.

In 1982, the API discontinued publishing disaggregated kerosene statistics. Since 1982, PSA data on kerosene product supplied have been added to API distillate fuel oil supplied data to maintain continuity of historical series and comparisons between sources. The PMD statistics on "first sales" of distillate fuel oil and kerosene into States for consumption in 1987 were higher than PSA statistics by 3.4 percent, the smallest discrepancy between the two data series since 1983. Historically, API statistics on distillate fuel oil supplied have been very close to similar PSA statistics. In 1987, the difference between API and PSA data was only 0.1 percent.

## Residual Fuel Oil Supplied

PSA statistics on residual fuel oil supplied are compared with API volumes and residual fuel oil "first sales" from the PMD (Table FE5). The PMD statistics for "first sales" of residual fuel oil have consistently been lower than PSA statistics throughout the 9-year period (imports of residual fuel oil by utilities for their own use is not captured in the PMD system). The 14.3-percent discrepancy between PSA and PMD statistics in 1986 was the largest since 1979. It narrowed to 8.7 percent in 1987.

The PSA and API volumes of residual fuel oil supplied have been close over the 9-year period. For the past 6 years, the differences between the data for these two sources have been within 2.0 percent. In 1987, there was a 1.1-percent difference.

## Petroleum Product Imports

Petroleum product import statistics from the PSA and the Census Bureau vary considerably. A number of differences exist, including reporting period, geographical coverage, and product definition (chemical composition versus end use).

### Table FE4. Distillate Fuel Oil (Including Kerosene) Supplied - Comparison of Statistics

| | PSA | PMD | | API | |
|---|---|---|---|---|---|
| Year | Million Barrels | Million Barrels | Percent of PSA | Million Barrels | Percent of PSA |
| 1987 | 1,121 | 1,159 | 103.4 | 1,122 | 100.1 |
| 1986 | 1,100 | 1,196 | 108.7 | 1,111 | 101.0 |
| 1985 | 1,088 | 1,160 | 106.6 | 1,090 | 100.2 |
| 1984 | 1,083 | 1,154 | 106.6 | 1,093 | 100.9 |
| 1983 | 1,028 | 1,045 | 101.7 | 1,027 | 99.9 |
| 1982 | 1,022 | 1,054 | 103.1 | 1,031 | 100.9 |
| 1981 | 1,079 | 1,067 | 98.9 | 1,109 | 102.8 |
| 1980 | 1,107 | 1,181 | 106.7 | 1,141 | 103.1 |
| 1979 | 1,277 | 1,345 | 105.3 | 1,291 | 101.1 |

Sources: •PSA: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340, 1981 through 1987, Table 2; *Petroleum Statement Annual*, DOE/EIA-0108, 1979 and 1980, Table 2, • PMD: Energy Information Administration, Form EIA-25, "Prime Suppliers Report ," 1979 through 1982; Form EIA-782C,"Monthly Report of Petroleum Products Sold into States for Consumption," *Petroleum Marketing Monthly* , 1983 through 1987. •API: American Petroleum Institute, *Monthly Statistical Report*, 1979 through 1987.

PSD developed a computer program to adjust for the coverage and differences (Table FE6). No adjustment could be made for differences in product definition.

In 1986, there was a 7.2-percent difference between PSA and adjusted Census data for distillate fuel oil. The difference in 1987 increased to 9.4 percent. Distillate fuel oil is believed to be reported under four TSUSA (Tariff Schedules of the United States Annotated) codes. These codes are based on chemical composition, while PSA codes are based on end use. The definitional difference may be one of the causes of discrepancy between PSA data and Census data. Discrepancies may also occur because some importers may report unfinished oils (light) to Census as distillate fuel oil. The comparison

## Table FE5. Residual Fuel Oil Supplied for Domestic Use - Comparison of Statistics

| | PSA | PMD | | API | |
|---|---|---|---|---|---|
| Year | Million Barrels | Million Barrels | Percent of PSA | Million Barrels | Percent of PSA |
| 1987 | 462 | 422 | 91.3 | 467 | 101.1 |
| 1986 | 518 | 444 | 85.7 | 508 | 98.1 |
| 1985 | 439 | 411 | 93.6 | 433 | 98.6 |
| 1984 | 501 | 484 | 96.6 | 498 | 99.4 |
| 1983 | 519 | 510 | 98.3 | 525 | 101.2 |
| 1982 | 627 | 574 | 91.5 | 622 | 99.2 |
| 1981 | 762 | 723 | 94.9 | 780 | 102.4 |
| 1980 | 918 | 815 | 88.8 | 937 | 102.1 |
| 1979 | 1,032 | 791 | 76.6 | 1,044 | 101.2 |

Sources: • PSA: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340, 1981 through 1987, Table 2; *Petroleum Statement Annual*, DOE/EIA-0108, 1979 and 1980, Table 2. • PMD: Energy Information Administration, Form EIA-25, "Prime Suppliers Report," 1979 through 1982; Form EIA-782C, "Monthly Report of Petroleum Products Sold into States for Consumption," *Petroleum Marketing Monthly*, 1983 through 1987. •API: American Petroleum Institute, *Monthly Statistical Report*, 1979 through 1987.

## Table FE6. Adjustment of Census Product Import Data and Comparison With PSA (Thousand Barrels, Except Where Indicated)

| | Distillate Fuel Oil | | Motor Gasoline | | Residual Fuel Oil | |
|---|---|---|---|---|---|---|
| | 1986 | 1987 | 1986 | 1987 | 1986 | 1987 |
| Census Published Imports | 87,234 | 85,618 | 136,594 | 153,617 | 275,157 | 254,454 |
| - General | 595 | 1,085 | 644 | 573 | 484 | 5,866 |
| - Preceding Month[a] | 37,248 | 15,813 | 66,313 | 31,136 | 139,105 | 53,628 |
| + Succeeding Month[a] | 33,124 | 15,573 | 59,499 | 31,370 | 127,968 | 52,222 |
| - Into U.S. Territory[b] | 413 | 1,143 | 4,569 | 3,756 | 13,495 | 12,098 |
| + From U.S. Territories[b] | 14,698 | 18,765 | 10,956 | 11,838 | 34,848 | 34,140 |
| Adjusted Census Imports | 96,795 | 101,914 | 135,521 | 161,359 | 284,900 | 269,214 |
| PSA Imports | 90,296 | 93,176 | 118,930 | 140,204 | 244,153 | 206,138 |
| Census Imports as Percent of PSA Imports | 107.2 | 109.4 | 114.0 | 115.1 | 116.7 | 130.6 |

Sources: • Census: Bureau of the Census, IM-115 Data Tape 1986 and 1987. • PSA: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340, 1986 and 1987, Table 2.

[a] The Bureau of the Census tabulates data on a "statistical month" basis. This combines data on the basis of the month in which the data are received, regardless of the actual month of import. Therefore, this adjustment (based on Customs entry forms) is intended to alter accountability of Census import data to reflect the actual year of import.

[b] The Bureau of the Census tabulates data on imports into Puerto Rico and the Virgin Islands because U.S. Customs entry zones exist in these locations. The PSA considers only imports into the 50 States and the District of Columbia.

Note: Totals may not equal sum of components due to independent rounding.

## Information on Data Sources

**American Petroleum Institute:** In this article, API's annual statistics are totals of initial monthly values. The initial API published monthly estimate is derived from API sources, but later API publications reflect revisions using EIA data. PSA statistics on crude oil include imports for the Strategic Petroleum Reserve (SPR) while API statistics do not. Therefore, the following figures for SPR were added to the API figures: 26.5 million barrels in 1987, 17.6 million barrels in 1986, 43.1 million barrels in 1985, 71.9 million barrels in 1984, 85.4 million barrels in 1983, 60.2 million barrels in 1982, 93.4 million barrels in 1981, 16.1 million barrels in 1980, and 24.5 million barrels in 1979. The API publishes monthly estimates of motor gasoline, distillate fuel oil, and residual fuel oil delivered from primary storage in thousand barrels per day. In 1982, the API discontinued publishing kerosene as a separate category. PSA values for kerosene supplied (35 million barrels in 1987, 36 million barrels in 1986, 42 million barrels in 1985 and 1984, 46 million barrels in 1983 and 47 million barrels in 1982) have been added to API distillate totals.

***Oil and Gas Journal*:** The *Oil and Gas Journal* publishes weekly averages of crude oil production in thousand barrels per day. These averages are used to produce monthly totals as follows: the average for each week is used as a daily production estimate for each of the days the week covers. For each month, the production estimates for days covered by the month are summed. These totals are converted from thousand to million barrels for this article.

**U.S. Bureau of the Census:** Census data for 1979 are from computer printouts from the Bureau of the Census Report IM-245X dated December 19, 1980. Data for 1980 through 1985 are from the *Annual U.S. Imports for Consumption and General Imports*. Since 1986, Census data have been available through the IM-115 data tape. Imports to Puerto Rico and the Virgin Islands are excluded. Census data do not include imports into the United States from Puerto Rico and the Virgin Islands.

**Petroleum Marketing Division:** EIA's Petroleum Marketing Division data are from the Form EIA-25, "Prime Suppliers Report" (computer printouts), 1979-1982. "Prime supplier" usually is the supplier or producer which makes the first sale of any product into the State. In 1983, the Form EIA-25 was incorporated into the Form EIA-782C, "Monthly Report of Petroleum Products Sold into States for Consumption."

between Census distillate fuel oil volumes plus light unfinished oils reduces the differences to 3.9 percent in 1986 and to 6.8 percent in 1987, with PSA volumes lower.

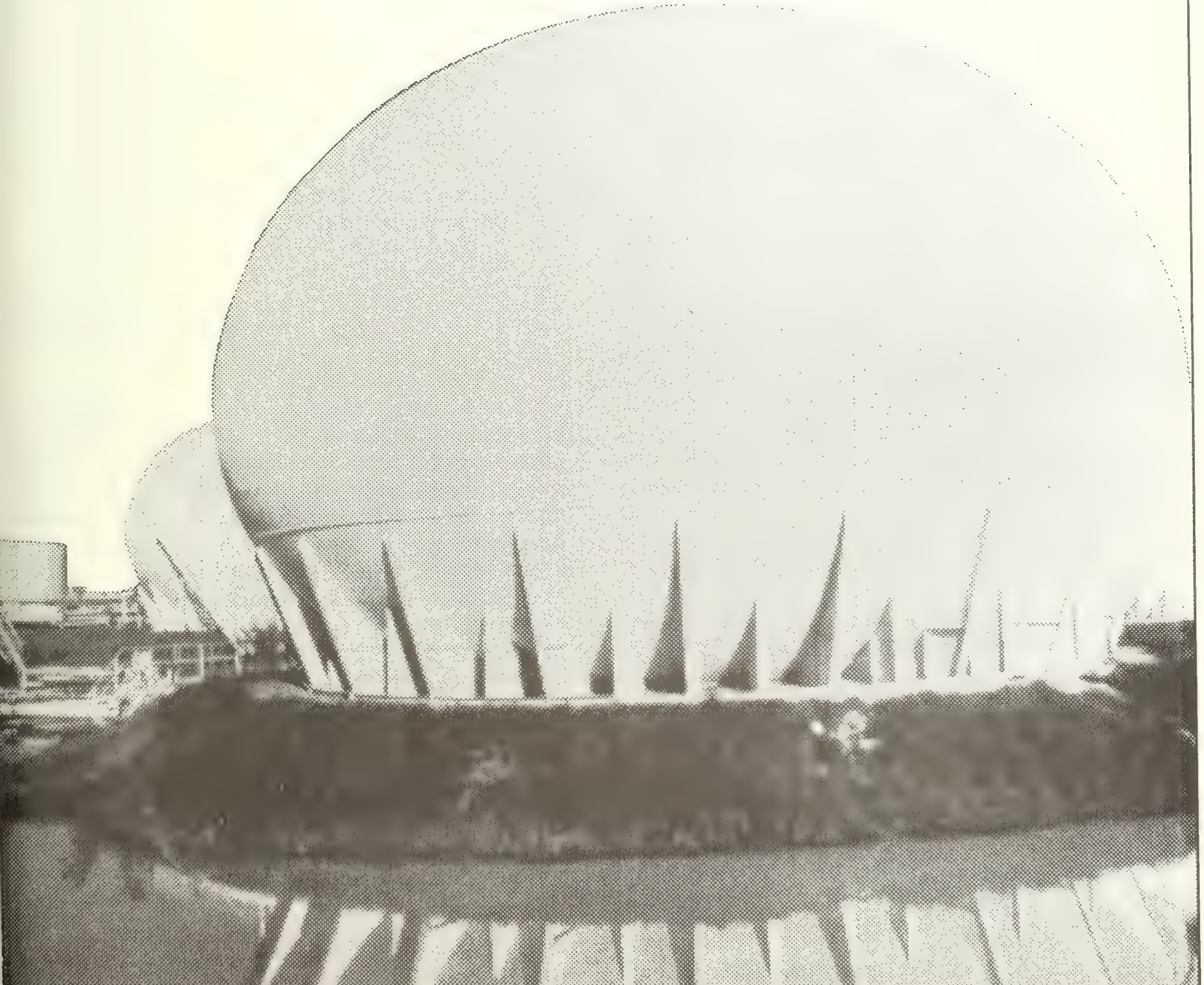
Motor gasoline discrepancies of 14.0 percent in 1986 and 15.1 percent in 1987 have been studied during the past year. One of the causes for the large discrepancies was the classification of motor gasoline blending components. The PSA has a separate category for motor gasoline blending components and the Census does not. When the sum of PSA motor gasoline and motor gasoline blending components is compared with the Census sum of motor gasoline and products used as blending components, the difference is reduced to 2.0 percent in 1986 and to 1.8 percent in 1987, with PSA volumes lower.

For 1986 and 1987, the Census volumes for residual fuel oil imports have been larger than the PSA volumes. There was a 16.7-percent difference in 1986 and a 30.6-percent difference in 1987. Classification problems also exist in the residual fuel oil category where importers sometimes report unfinished oils (heavy) to Census as residual fuel oil. The comparison between Census residual fuel oil volumes and the total of PSA residual fuel oil volumes plus heavy unfinished oils reduces the difference to 1.4 percent in 1986 and 1.1 percent in 1987, with PSA volumes higher.

## Conclusion

In most cases, 1987 PSA statistics showed close agreement with similar data from other sources in crude oil production and imports and selected petroleum products supplied. Through research projects and other studies, the differences between the PSA and the comparative sources of data have diminished or remained within reasonable bounds. Investigation into the differences in definitional categories for Census and PSA import statistics will continue.

# Highlights



# Highlights

Total U.S. demand for petroleum products (measured as product supplied) averaged 16.8 million barrels per day in September 1988, about 0.6 million barrels per day below the level for August and over 0.1 million barrels per day above the level for September 1987. Through the first 3 quarters of 1988, total product supplied averaged 17.0 million barrels per day, 2.3 percent higher than during the same period of 1987. Decreases in demand for residual fuel oil, motor gasoline, and asphalt and road oil accounted for most of the drop in total product supplied this month.

Other highlights for September 1988 include:

- Total product stocks increased for the third consecutive month, rising 8.9 million barrels to 744.3 million barrels.
- Crude oil stocks, excluding the Strategic Petroleum Reserve (SPR), dropped for the third straight month. Stocks decreased 4.7 million barrels to 328.4 million barrels.
- Refinery utilization decreased from a rate of 87.4 percent in August to 83.7 percent in September.

## Product Supplied

Residual fuel oil demand in September averaged 1.1 million barrels per day, over 0.1 million barrels per day below the demand for August (Table H1). A return to more seasonal temperatures in September following an unusually hot August lowered the demand for heavy fuel oil at electric utilities. Continued fuel switching in some industrial markets has also weakened residual fuel oil demand in recent months. For the third quarter of this year, residual fuel oil demand averaged 1.2 million barrels per day, 6.9 percent lower than in the third quarter of 1987. During the first 9 months of 1988, however, residual fuel oil demand was unchanged from its level during the comparable period of 1987.

The end of the summer driving season was reflected in lower motor gasoline demand in September. Demand fell almost 0.2 million barrels per day from the August level, to 7.3 million barrels per day. Motor gasoline demand for the third quarter averaged 7.4 million barrels per day, up 0.9 percent from a year ago. For the first 9 months of 1988, demand was 1.6 percent higher than during the same period of 1987 as sustained economic growth and slightly lower real motor gasoline prices contributed to increased highway travel.

Distillate fuel oil demand averaged 2.8 million barrels per day in September, less than 0.1 million barrels per day below the August level. Third quarter distillate demand averaged 2.8 million barrels per day, 2.6 percent above the comparable 1987 level. For the first 9 months of 1988, distillate demand was 3.9 percent higher than during the comparable period of 1987. Cooler first-quarter weather and a moderate increase in industrial production, which contributed to growth in truck and rail traffic, accounted for much of the increase in distillate demand this year.

Kerosene-type jet fuel demand decreased marginally in September, averaging 1.2 million barrels per day. During the third quarter, airline traffic continued to grow but at a slower rate than earlier in the year. Third quarter kerosene-type jet fuel demand averaged 1.2 million barrels per day, 3.8 percent above the average during the third quarter of 1987. Demand for the first 9 months of 1988 was 4.9 percent higher than for the first 9 months of 1987.

The demand for asphalt and road oil fell 0.1 million barrels per day in September to 0.7 million barrels per day, marking the beginning of the seasonal shift in the consumption pattern for this product. Year-to-year comparisons show relatively weak growth in asphalt and road oil consumption this year. During the third quarter of 1988, asphalt and road oil demand was 0.7 million barrels per day, 1.1 percent higher than the third quarter level for 1987. For the first 9 months of 1988, demand for asphalt and road oil was 0.6 percent above the level for the comparable 1987 period.

Demand for liquefied petroleum gases (LPGs) in September averaged 1.7 million barrels per day, nearly 0.2 million barrels per day higher than in August. Most of the increase was in propane demand which grew from 0.8 million barrels per day in August to nearly 1.0 million barrels per day in September.. LPG demand for the third quarter averaged 1.5 million barrels per day, 2.4 percent above the level for the third quarter of

## Table H1. Petroleum Supply Summary, September 1988
(Million Barrels per Day, Except Where Noted)

| Category | 1988 | | | 1987 | Cumulative January Through September | |
|---|---|---|---|---|---|---|
| | September | August | Difference[1] | September | 1988 | 1987 |
| **Products Supplied** | **16.8** | **17.4** | **-0.6** | **16.7** | **17.0** | **16.6** |
| Finished Motor Gasoline | 7.3 | 7.5 | -0.2 | 7.2 | 7.3 | 7.2 |
| Distillate Fuel Oil | 2.8 | 2.9 | -0.1 | 2.8 | 3.0 | 2.9 |
| Residual Fuel Oil | 1.1 | 1.3 | -0.1 | 1.3 | 1.3 | 1.3 |
| Liquefied Petroleum Gases | 1.7 | 1.5 | 0.2 | 1.6 | 1.6 | 1.6 |
| Other Petroleum Products[2] | 3.8 | 4.2 | -0.4 | 3.7 | 3.7 | 3.6 |
| Crude Oil | (s) | (s) | (s) | (s) | (s) | (s) |
| **Crude Oil Inputs** | **13.3** | **13.8** | **-0.5** | **13.2** | **13.3** | **12.8** |
| **Refinery Utilization (percent)** | **83.7** | **87.4** | **-3.7** | **85.5** | **84.5** | **83.1** |
| **Imports** | **7.2** | **7.2** | **(s)** | **7.2** | **7.0** | **6.6** |
| **Crude Oil** | **5.2** | **5.0** | **0.1** | **5.1** | **5.0** | **4.6** |
| SPR | 0.1 | (s) | 0.1 | 0.1 | 0.1 | 0.1 |
| Other | 5.1 | 5.0 | 0.1 | 5.0 | 4.9 | 4.5 |
| **Products** | **2.0** | **2.1** | **-0.1** | **2.1** | **2.0** | **2.0** |
| Finished Motor Gasoline | 0.4 | 0.5 | -0.1 | 0.4 | 0.4 | 0.4 |
| Distillate Fuel Oil | 0.3 | 0.3 | (s) | 0.2 | 0.3 | 0.3 |
| Residual Fuel Oil | 0.6 | 0.5 | 0.1 | 0.5 | 0.5 | 0.6 |
| Liquefied Petroleum Gases | 0.2 | 0.2 | (s) | 0.3 | 0.2 | 0.2 |
| Other Petroleum Products[2] | 0.6 | 0.6 | -0.1 | 0.6 | 0.6 | 0.6 |
| **Exports** | **0.7** | **0.8** | **-0.1** | **0.8** | **0.8** | **0.7** |
| Crude Oil | 0.1 | 0.2 | (s) | 0.1 | 0.2 | 0.1 |
| Products | 0.6 | 0.7 | -0.1 | 0.7 | 0.7 | 0.6 |
| **Total Net Imports** | **6.5** | **6.4** | **0.2** | **6.4** | **6.2** | **5.8** |
| **Stock Change[3]** | **0.2** | **-0.2** | **0.4** | **0.5** | **0.1** | **(s)** |
| Crude Oil | -0.1 | -0.5 | 0.4 | 0.2 | (s) | 0.1 |
| Products | 0.3 | 0.3 | (s) | 0.2 | 0.1 | -0.1 |
| **Stocks at End of Period (Million Barrels)** | | | | | | |
| **Crude Oil** | **883.1** | **885.3** | **-2.2** | **871.1** | -- | -- |
| SPR | 554.7 | 552.1 | 2.5 | 533.9 | -- | -- |
| Other | 328.4 | 333.2 | -4.7 | 337.2 | -- | -- |
| **Products** | **744.3** | **735.4** | **8.9** | **734.7** | -- | -- |
| Finished Motor Gasoline | 181.9 | 182.4 | -0.4 | 191.2 | -- | -- |
| Distillate Fuel Oil | 131.0 | 125.2 | 5.8 | 126.8 | -- | -- |
| Residual Fuel Oil | 44.2 | 37.8 | 6.4 | 44.4 | -- | -- |
| Liquefied Petroleum Gases | 121.6 | 120.6 | 1.0 | 114.3 | -- | -- |
| Other Petroleum Products[2] | 265.6 | 269.4 | -3.9 | 257.9 | -- | -- |
| **Total Crude Oil and Products** | **1,627.4** | **1,620.7** | **6.7** | **1,605.7** | -- | -- |

[1] Difference is equal to volume for current month minus volume for previous month.

[2] Includes pentanes plus, other hydrocarbons and alcohol, unfinished oils, gasoline blending components, and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil, and liquefied petroleum gases.

[3] A negative number indicates a decrease in stocks and a positive number indicates an increase.

(s) = Less than 0.05 million barrels or less than 0.05 percent.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration: *Petroleum Supply Annual*, 1987 (June 1988). Appropriate issues of *Petroleum Supply Monthly* . (See Explanatory Notes 9.1 through 9.6.)

1987. From January through September of 1988, LPG demand was 3.0 percent higher than during the comparable period of 1987. Increased heating requirements during the first quarter, greater use of LPG's for irrigation during the drought, and increased petrochemical feedstock use accounted for the higher demand for LPG's this year.

## Product Stocks

Total ending stocks of petroleum products rose 8.9 million barrels in September to 744.3 million barrels. Residual fuel oil and distillate fuel oil showed the largest increases and together accounted for more than the total increase. Partially offsetting the increase in distillate and residual fuel oil stocks was a decline of 2.3 million barrels in stocks of asphalt and road oil to 19.6 million barrels in September. After 3 consecutive months of stock withdrawal, residual fuel oil stocks increased 6.4 million barrels in September to 44.2 million barrels. A drop in demand of 0.1 million barrels per day was responsible for much of the increase in residual fuel oil stocks. Stocks of distillate fuel oil rose to 131.0 million barrels in September, 5.8 million barrels above the level at the end of August. Increases in both residual fuel oil and distillate fuel oil stocks reflect preparations for the winter heating season.

## Crude Oil

Crude oil stocks (excluding SPR) fell for the third consecutive month in September, though at a much lower rate than in August. Following a decline of 16.2 million barrels in August, crude oil stocks decreased 4.7 million barrels in September to 328.4 million barrels. The crude oil stock level at the end of September 1988 was 8.7 million barrels below the level at the end of September 1987.

Domestic crude oil production fell to 7.9 million barrels per day in September, 0.2 million barrels per day below the level for August. Contributing to the decline was hurricane activity along the U.S. Gulf Coast, which forced the shutdown and evacuation of offshore rigs in that region for several days.

*Hurricanes Florence and Gilbert forced the shutdown and evacuation of offshore rigs in the Gulf of Mexico for several days during September. The disruptions these storms caused to offshore production operations in the Gulf contributed to the drop in domestic crude oil production to 7.9 million barrels per day.*

Crude oil production during the first 9 months of 1988 averaged 8.2 million barrels per day, 2.0 percent lower than during the comparable period in 1987.

Imports of crude oil (excluding SPR) increased 0.1 million barrels in September to 5.1 million barrels per day. Through the first 9 months of 1988, crude oil imports averaged 4.9 million barrels per day, 9.0 percent higher than during the same period in 1987.

## Refinery Utilization

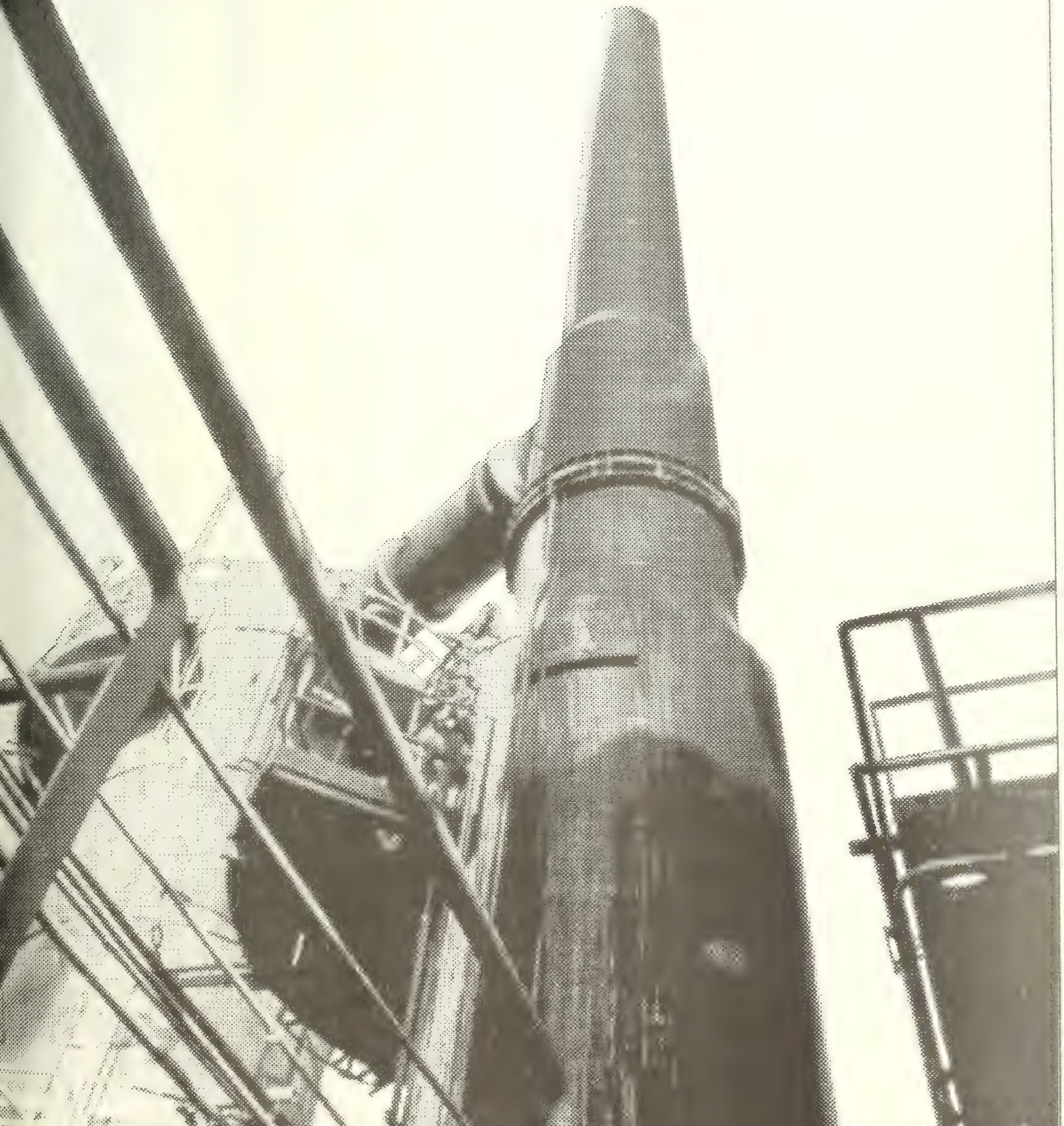
U.S. refinery utilization decreased in September for the first time since February. From a rate of 87.4 percent in August, refinery utilization dropped to 83.7 percent in September primarily because of a decrease of 0.6 million barrels per day in gross inputs to crude oil distillation units. September typically marks the beginning of the seasonal decline in crude runs from the summer peak. The seasonal decline occurs because of planned maintenance activities in preparation for the winter heating season. Gross inputs to distillation units averaged 13.4 million barrels per day in September, while operable capacity averaged 16.0 million barrels per day. Downstream activity also decreased in September. Inputs of fresh feed to catalytic cracking, catalytic hydrocracking, and coking units averaged nearly 6.9 million barrels per day, almost 0.3 million barrels per day below the August level.

## Payment of Diesel Fuel Excise Tax by Farmers Repealed

Legislation signed into law by President Reagan on November 11, 1988 repeals the diesel fuel excise tax collection procedure that was imposed on farmers and other off-highway consumers earlier this year (see the March 1988 "Highlights" section). Diesel fuel for off-highway use is not subject to the excise tax, but for several months in 1988 off-highway diesel consumers were required to pay the 15.1 cent-per-gallon tax, and then apply for a refund.

*Refinery maintenance in preparation for the winter heating season resulted in lower refinery utilization in September. The utilization rate decreased from 87.4 percent in August to 83.7 percent in September.*

# Summary Statistics



## Table S1. Crude Oil[1] and Petroleum Products Overview

| | Field Production | | | Stock Withdrawal[2] | | | Ending Stocks[3] |
|---|---|---|---|---|---|---|---|
| | Total Domestic[4] | Crude Oil | Natural Gas Plant Liquids | Crude Oil[5] | Petroleum Products | Petroleum Products Supplied | Crude Oil[5] and Petroleum Products |
| | Thousand Barrels per Day | | | | | | Million Barrels |
| 1973 Average | 10,975 | 9,208 | 1,738 | 11 | -146 | 17,308 | 1,008 |
| 1974 Average | 10,498 | 8,774 | 1,688 | -62 | -117 | 16,653 | [8] 1,074 |
| 1975 Average | 10,045 | 8,375 | 1,633 | [8] -17 | [8] -15 | 16,322 | 1,133 |
| 1976 Average | 9,774 | 8,132 | 1,603 | -39 | 96 | 17,461 | 1,112 |
| 1977 Average | 9,913 | 8,245 | 1,618 | -170 | -378 | 18,431 | 1,312 |
| 1978 Average | 10,328 | 8,707 | 1,567 | -78 | 172 | 18,847 | 1,278 |
| 1979 Average | 10,179 | 8,552 | 1,584 | -148 | -25 | 18,513 | 1,341 |
| 1980 Average | 10,214 | 8,597 | 1,573 | -98 | -42 | 17,056 | [8] 1,392 |
| 1981 Average | 10,230 | 8,572 | 1,609 | [8] -290 | [8] 130 | 16,058 | 1,484 |
| 1982 Average | 10,252 | 8,649 | 1,550 | -136 | 283 | 15,296 | [8] 1,430 |
| 1983 Average | 10,299 | 8,688 | 1,559 | [8] -214 | [8] 234 | 15,231 | 1,454 |
| 1984 Average | 10,554 | 8,879 | 1,630 | -199 | -81 | 15,726 | 1,556 |
| 1985 Average | 10,636 | 8,971 | 1,609 | -50 | 153 | 15,726 | 1,519 |
| 1986 January | 10,911 | 9,137 | 1,711 | -383 | -151 | 16,088 | 1,535 |
| February | 10,916 | 9,173 | 1,696 | -37 | 804 | 16,186 | 1,514 |
| March | 10,664 | 9,013 | 1,604 | -345 | 1,160 | 16,276 | 1,489 |
| April | 10,435 | 8,864 | 1,523 | 41 | 262 | 15,945 | 1,479 |
| May | 10,440 | 8,838 | 1,543 | 260 | -1,109 | 15,993 | 1,506 |
| June | 10,187 | 8,623 | 1,504 | 3 | -1,238 | 16,049 | 1,543 |
| July | 10,225 | 8,660 | 1,507 | -541 | -422 | 16,307 | 1,573 |
| August | 9,875 | 8,374 | 1,445 | 242 | -551 | 16,618 | 1,582 |
| September | 9,852 | 8,328 | 1,468 | -217 | -973 | 15,909 | 1,618 |
| October | 9,954 | 8,419 | 1,477 | -233 | 476 | 16,602 | 1,610 |
| November | 10,061 | 8,412 | 1,569 | 95 | -147 | 16,221 | 1,612 |
| December | 9,985 | 8,352 | 1,571 | 186 | 443 | 17,131 | 1,593 |
| **Average** | **10,289** | **8,680** | **1,551** | **-78** | **-124** | **16,281** | – |
| 1987 January | 10,139 | 8,480 | 1,582 | -166 | 376 | 16,684 | 1,586 |
| February | 10,073 | 8,389 | 1,618 | -22 | 831 | 16,908 | 1,563 |
| March | 10,131 | 8,464 | 1,598 | -125 | 340 | 16,165 | 1,557 |
| April | 10,139 | 8,498 | 1,590 | 50 | 532 | 16,524 | 1,539 |
| May | 9,977 | 8,336 | 1,585 | 36 | -116 | 16,026 | 1,542 |
| June | 9,906 | 8,279 | 1,578 | -165 | -42 | 16,830 | 1,548 |
| July | 9,895 | 8,251 | 1,582 | 33 | -372 | 17,113 | 1,558 |
| August | 9,843 | 8,210 | 1,571 | -345 | -737 | 16,346 | 1,592 |
| September | 9,851 | 8,205 | 1,582 | -220 | -236 | 16,670 | 1,606 |
| October | 10,037 | 8,364 | 1,602 | -661 | 523 | 16,941 | 1,610 |
| November | 10,112 | 8,397 | 1,637 | -355 | -478 | 16,343 | 1,635 |
| December | 10,001 | 8,318 | 1,621 | 405 | 482 | 17,445 | 1,607 |
| **Average** | **10,008** | **8,349** | **1,595** | **-128** | **87** | **16,665** | – |
| 1988 January | [E] 9,874 | [E] 8,245 | 1,569 | 56 | 285 | 17,224 | 1,597 |
| February | [E] 10,016 | [E] 8,376 | 1,594 | -130 | 895 | 17,584 | 1,575 |
| March | [E] 10,044 | [E] 8,347 | 1,628 | -212 | 748 | 17,530 | 1,559 |
| April | [E] 9,935 | [E] 8,268 | 1,609 | -194 | -450 | 16,440 | 1,578 |
| May | [E] 9,881 | [E] 8,203 | 1,624 | -41 | -1,049 | 16,117 | 1,612 |
| June | [E] 9,815 | [E] 8,158 | 1,605 | -113 | 146 | 17,054 | 1,611 |
| July | [E] 9,728 | [E] 8,059 | 1,609 | 270 | -788 | 16,555 | 1,627 |
| August | [E] 9,756 | [E] 8,063 | 1,624 | 495 | -304 | 17,375 | 1,621 |
| September* | [RE] 9,585 | [RE] 7,900 | [R] 1,622 | [R] 74 | [R] -296 | [R] 16,816 | [R] 1,627 |
| October** | [PE] 9,768 | [PE] 8,085 | [E] 1,618 | [E] *-509* | [E] *534* | [E] *17,465* | [E] *1,628* |
| **10-Mo. Average** | **[PE] 9,840** | **[PE] 8,170** | **[E] 1,610** | **[E] -29** | **[E] -32** | **[E] 17,015** | – |
| **1987 10-Mo. Average** | **9,999** | **8,347** | **1,589** | **-160** | **103** | **16,617** | – |
| **1986 10-Mo. Average** | **10,342** | **8,740** | **1,547** | **-122** | **-179** | **16,200** | – |

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[1] Includes lease condensate.
[2] A negative number indicates an increase in stocks and a positive number indicates a decrease.
[3] Stocks are totals as of end of period.
[4] Includes crude oil, natural gas plant liquids, other hydrocarbons, and alcohol.
[5] Includes stocks located in the Strategic Petroleum Reserve.
[6] Includes crude oil for storage in the Strategic Petroleum Reserve.
[7] Net Imports equal Imports minus Exports.
[8] In January 1975, 1981, and 1983, numerous respondents were added to surveys affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10.

Footnotes continued on following page.

## Table S1. Crude Oil[1] and Petroleum Products Overview (Continued)

| | Imports | | | Exports | | | |
|---|---|---|---|---|---|---|---|
| | Total | Crude Oil[6] | Petroleum Products | Total | Crude Oil | Petroleum Products | Net Imports[7] |
| | Thousand Barrels per Day | | | | | | |
| **1973 Average** | **6,256** | **3,244** | **3,012** | **231** | **2** | **229** | **6,025** |
| **1974 Average** | **6,112** | **3,477** | **2,635** | **221** | **3** | **218** | **5,892** |
| **1975 Average** | **6,056** | **4,105** | **1,951** | **209** | **6** | **204** | **5,846** |
| **1976 Average** | **7,313** | **5,287** | **2,026** | **223** | **8** | **215** | **7,090** |
| **1977 Average** | **8,807** | **6,615** | **2,193** | **243** | **50** | **193** | **8,565** |
| **1978 Average** | **8,363** | **6,356** | **2,008** | **362** | **158** | **204** | **8,002** |
| **1979 Average** | **8,456** | **6,519** | **1,937** | **472** | **235** | **237** | **7,984** |
| **1980 Average** | **6,909** | **5,263** | **1,646** | **544** | **287** | **258** | **6,365** |
| **1981 Average** | **5,996** | **4,396** | **1,599** | **595** | **228** | **367** | **5,401** |
| **1982 Average** | **5,113** | **3,488** | **1,625** | **815** | **236** | **579** | **4,298** |
| **1983 Average** | **5,051** | **3,329** | **1,722** | **739** | **164** | **575** | **4,312** |
| **1984 Average** | **5,437** | **3,426** | **2,011** | **722** | **181** | **541** | **4,715** |
| **1985 Average** | **5,067** | **3,201** | **1,866** | **781** | **204** | **577** | **4,286** |
| **1986** January | 5,573 | 3,472 | 2,101 | 859 | 159 | 700 | 4,714 |
| February | 4,676 | 2,968 | 1,709 | 876 | 162 | 715 | 3,800 |
| March | 4,712 | 2,988 | 1,724 | 732 | 212 | 520 | 3,980 |
| April | 5,439 | 3,684 | 1,755 | 850 | 94 | 756 | 4,589 |
| May | 6,400 | 4,250 | 2,150 | 724 | 98 | 625 | 5,676 |
| June | 6,848 | 4,635 | 2,213 | 642 | 240 | 401 | 6,206 |
| July | 6,942 | 4,726 | 2,216 | 685 | 65 | 620 | 6,256 |
| August | 7,168 | 4,859 | 2,309 | 868 | 233 | 635 | 6,300 |
| September | 7,090 | 5,031 | 2,059 | 714 | 161 | 553 | 6,375 |
| October | 6,427 | 4,419 | 2,008 | 831 | 151 | 680 | 5,597 |
| November | 6,592 | 4,615 | 1,977 | 821 | 115 | 706 | 5,771 |
| December | 6,700 | 4,412 | 2,288 | 820 | 159 | 661 | 5,881 |
| **Average** | **6,224** | **4,178** | **2,045** | **785** | **154** | **631** | **5,439** |
| **1987** January | 6,353 | 4,385 | 1,968 | 703 | 84 | 619 | 5,650 |
| February | 5,984 | 3,866 | 2,118 | 977 | 284 | 694 | 5,007 |
| March | 5,794 | 3,779 | 2,015 | 720 | 150 | 570 | 5,074 |
| April | 5,911 | 4,132 | 1,779 | 870 | 247 | 624 | 5,041 |
| May | 6,073 | 4,340 | 1,732 | 666 | 69 | 597 | 5,407 |
| June | 6,769 | 4,807 | 1,962 | 669 | 116 | 554 | 6,099 |
| July | 7,588 | 5,295 | 2,293 | 680 | 149 | 531 | 6,908 |
| August | 7,454 | 5,510 | 1,944 | 664 | 141 | 523 | 6,790 |
| September | 7,178 | 5,110 | 2,068 | 795 | 116 | 680 | 6,382 |
| October | 7,068 | 5,142 | 1,926 | 646 | 84 | 562 | 6,422 |
| November | 7,068 | 5,013 | 2,055 | 737 | 164 | 573 | 6,331 |
| December | 6,833 | 4,640 | 2,194 | 1,057 | 220 | 838 | 5,776 |
| **Average** | **6,678** | **4,674** | **2,004** | **764** | **151** | **613** | **5,914** |
| **1988** January | 6,900 | 4,619 | 2,281 | 891 | 212 | 679 | 6,009 |
| February | 6,995 | 4,692 | 2,303 | 867 | 149 | 718 | 6,128 |
| March | 6,727 | 4,788 | 1,938 | 839 | 218 | 622 | 5,888 |
| April | 7,050 | 5,126 | 1,924 | 678 | 117 | 562 | 6,371 |
| May | 7,218 | 5,234 | 1,983 | 817 | 141 | 676 | 6,401 |
| June | 6,885 | 5,055 | 1,830 | 941 | 141 | 800 | 5,944 |
| July | 6,994 | 5,006 | 1,988 | 831 | 191 | 640 | 6,164 |
| August | 7,174 | 5,039 | 2,135 | 817 | 155 | 661 | 6,357 |
| September* | R 7,220 | R 5,183 | R 2,037 | R 675 | R 122 | R 554 | R 6,545 |
| October** | E *7,457* | E *5,329* | E *2,128* | E 822 | E 170 | E 652 | E 6,635 |
| **10-Mo. Average** | **E 7,062** | **E 5,008** | **E 2,054** | **E 818** | **E 162** | **E 656** | **E 6,244** |
| **1987 10-Mo. Average** | **6,623** | **4,644** | **1,980** | **736** | **142** | **594** | **5,887** |
| **1986 10-Mo. Average** | **6,139** | **4,111** | **2,028** | **777** | **157** | **620** | **5,361** |

Footnotes continued.

R = Revised data. (s) = Less than 500 barrels per day. E = Estimated. PE = Preliminary estimate. RE = Revised estimate.

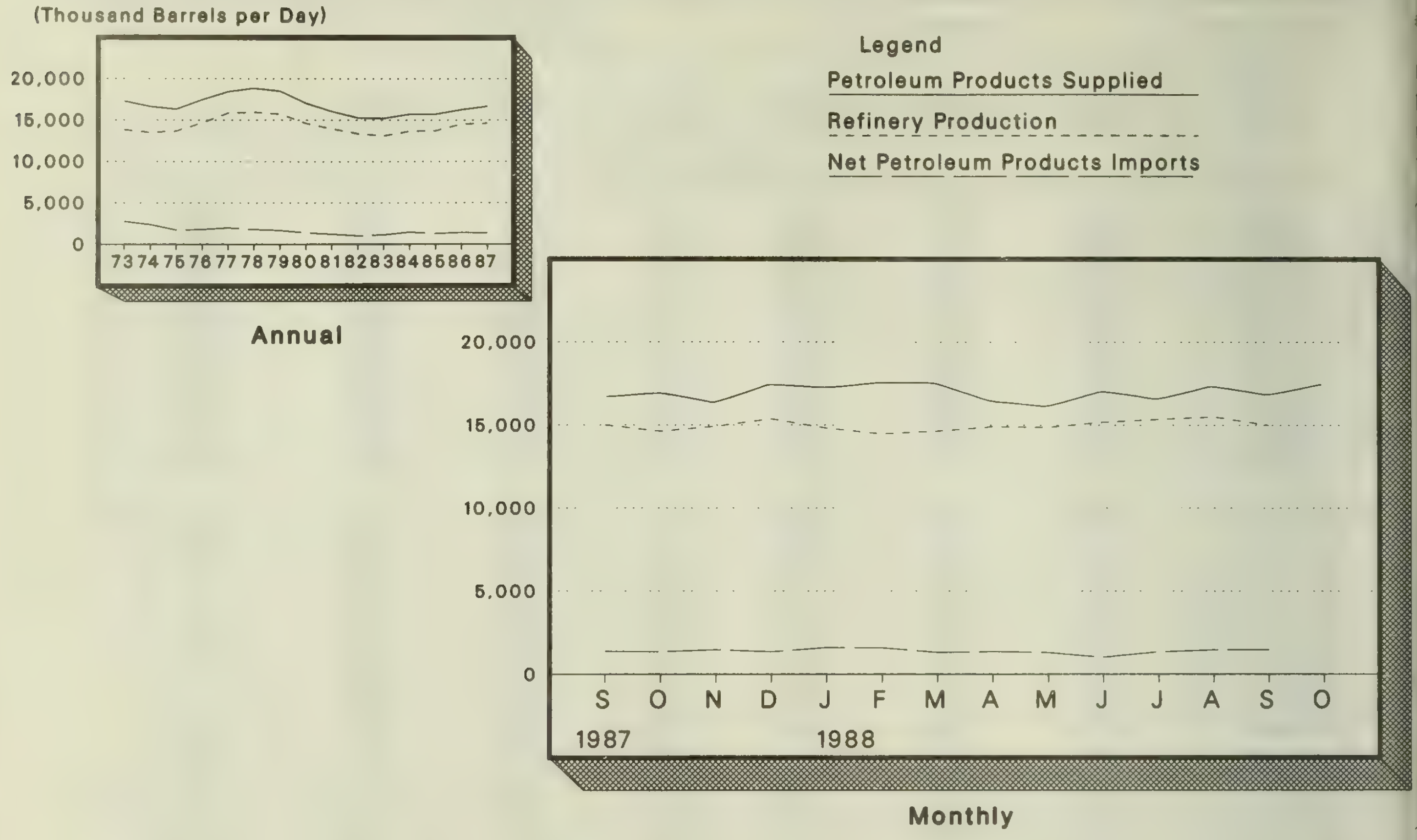
* See Explanatory Note 9.1.

** Italics denote estimates based upon preliminary data. See Explanatory Note 8.

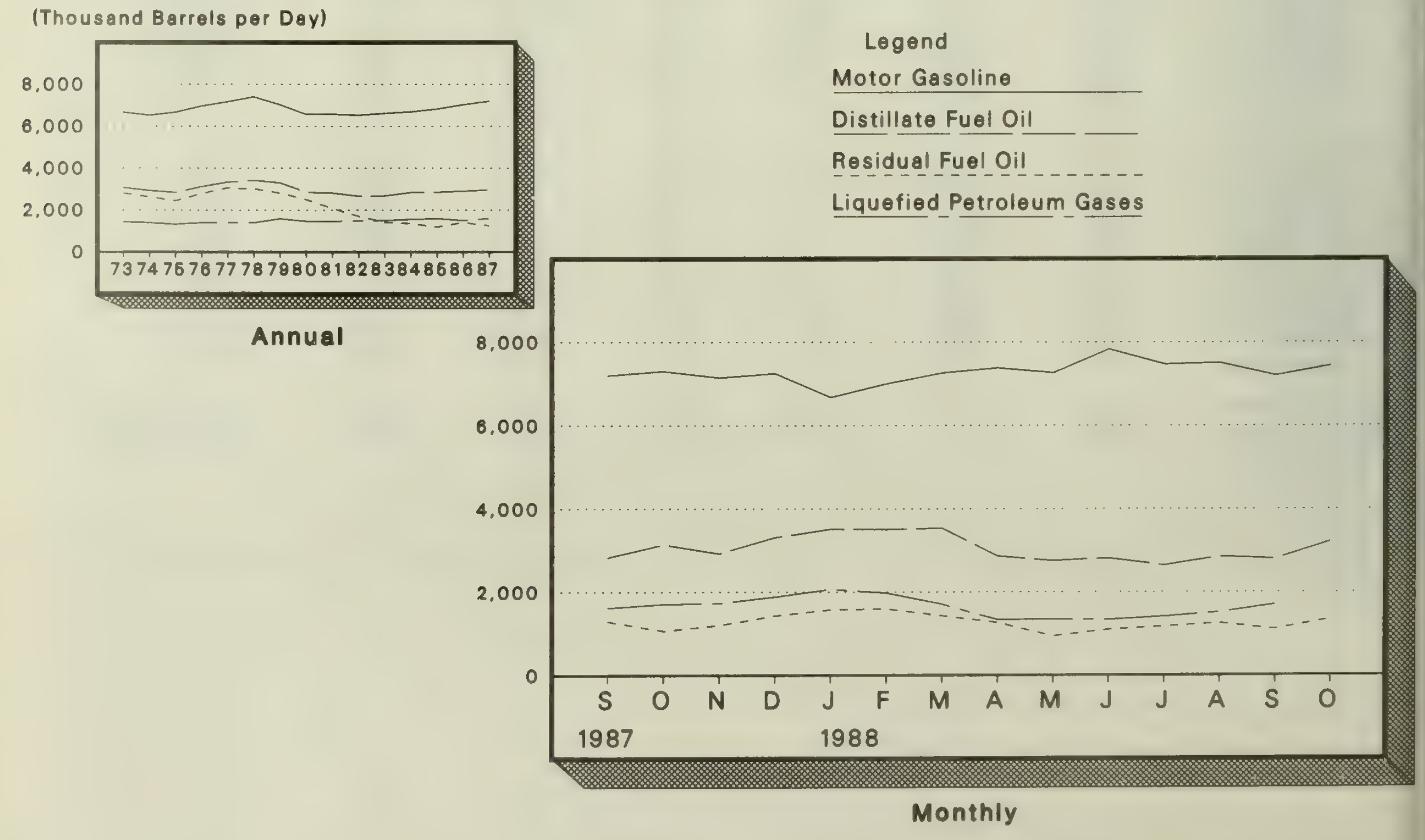
Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: See the last page of this section.

## Figure S1. Petroleum Overview

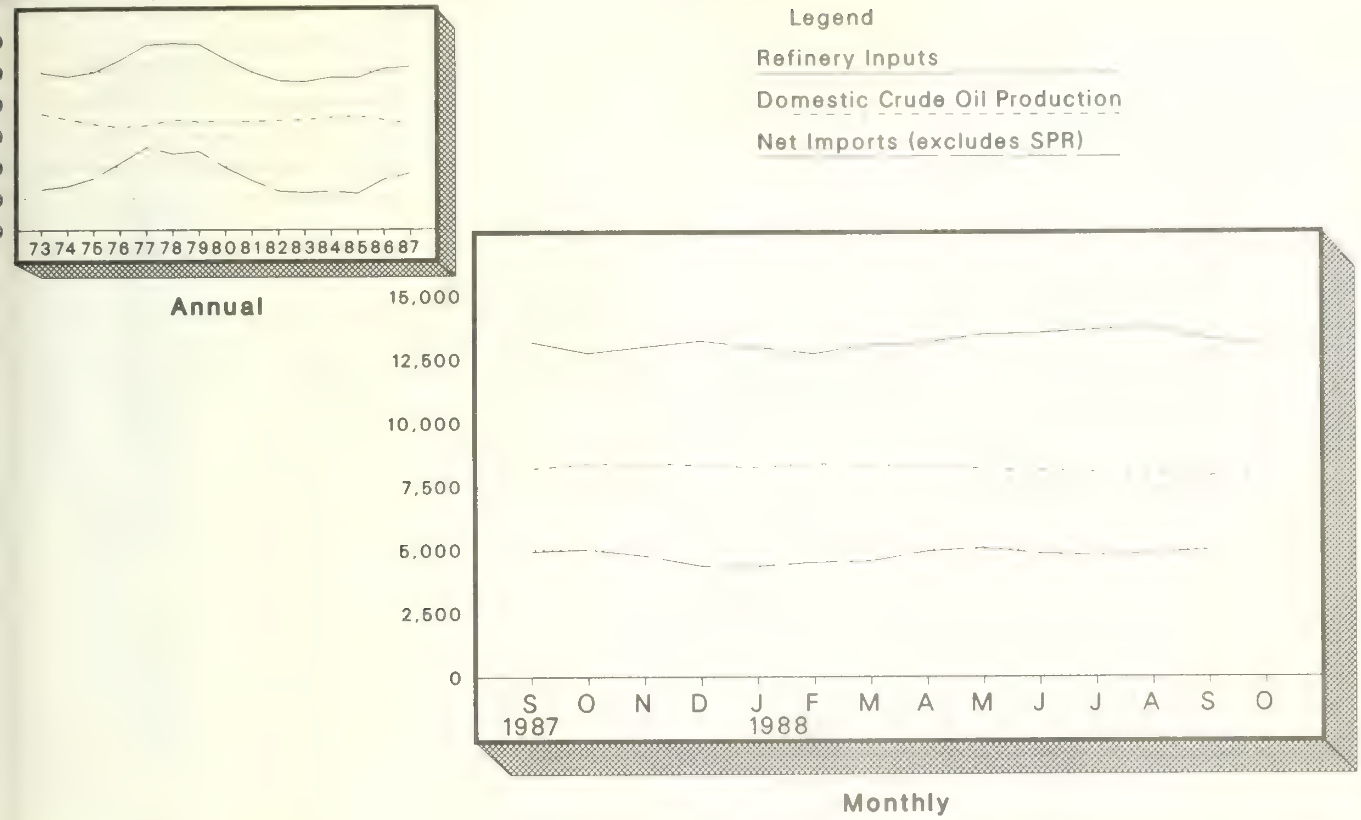


## Figure S2. Petroleum Products Supplied



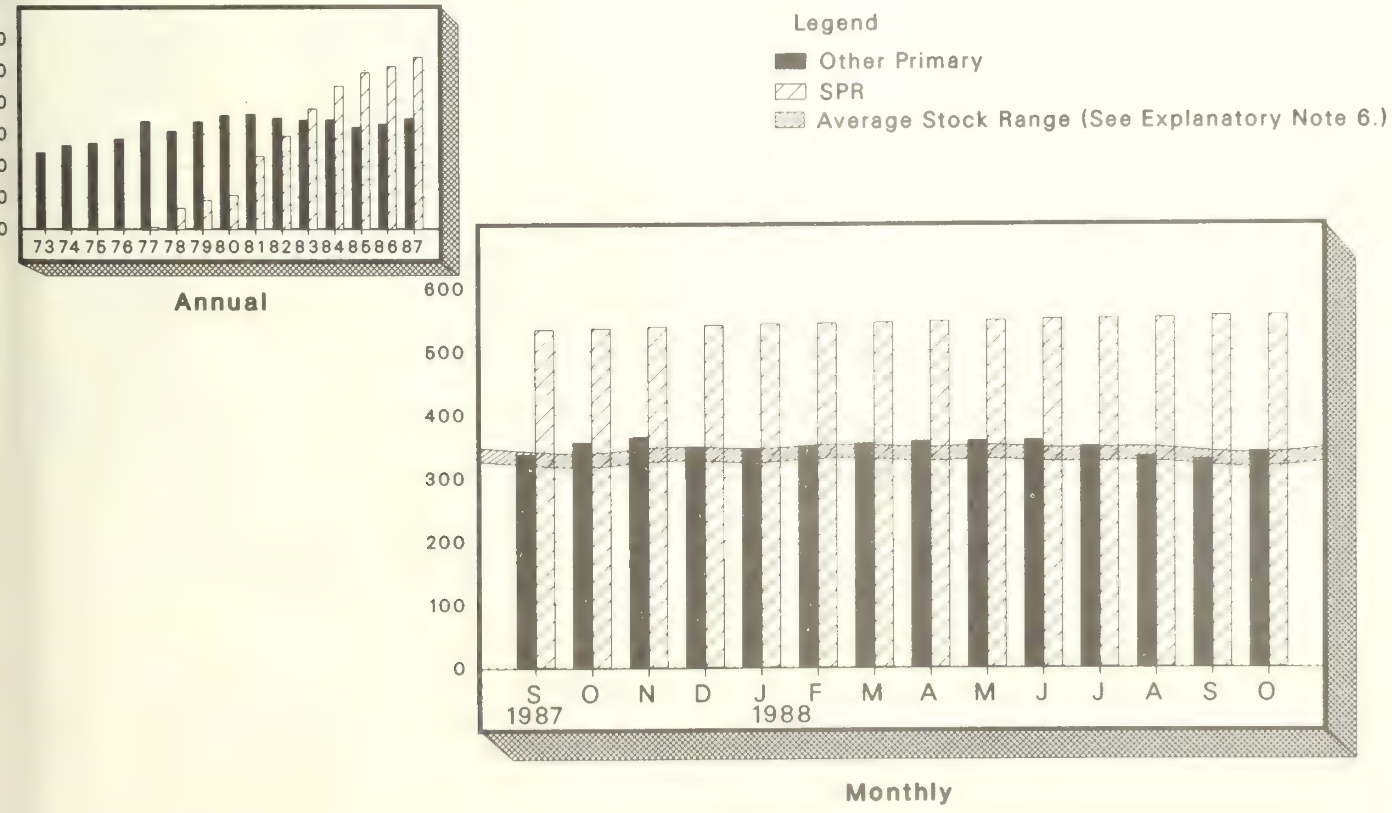
## re S3. Crude Oil Supply and Disposition

usand Barrels per Day)



## re S4. Crude Oil Ending Stocks

lion Barrels)



## Table S2. Crude Oil[1] Supply and Disposition

| | | Supply | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Field Production | | Imports | | | Stock Withdrawal [3] | | Unaccounted for Crude Oil [5] |
| | | Total Domestic | Alaskan | Total | SPR [4] | Other | SPR [4] | Other | |
| | | Thousand Barrels per Day | | | | | | | |
| **1973** | **Average** | **9,208** | **198** | **3,244** | **–** | **3,244** | **–** | **11** | **3** |
| **1974** | **Average** | **8,774** | **193** | **3,477** | **–** | **3,477** | **–** | **-62** | **-25** |
| **1975** | **Average** | **8,375** | **191** | **4,105** | **–** | **4,105** | **–** | **-17** | **17** |
| **1976** | **Average** | **8,132** | **173** | **5,287** | **–** | **5,287** | **–** | **-39** | **77** |
| **1977** | **Average** | **8,245** | **464** | **6,615** | **21** | **6,594** | **-20** | **-150** | **-6** |
| **1978** | **Average** | **8,707** | **1,229** | **6,356** | **162** | **6,195** | **-163** | **84** | **-57** |
| **1979** | **Average** | **8,552** | **1,401** | **6,519** | **67** | **6,452** | **-67** | **-81** | **-11** |
| **1980** | **Average** | **8,597** | **1,617** | **5,263** | **44** | **5,219** | **-45** | **-52** | **34** |
| **1981** | **Average** | **8,572** | **1,609** | **4,396** | **256** | **4,141** | **-336** | **[7] 46** | **83** |
| **1982** | **Average** | **8,649** | **1,695** | **3,488** | **165** | **3,323** | **-174** | **38** | **71** |
| **1983** | **Average** | **8,688** | **1,714** | **3,329** | **234** | **3,096** | **-234** | **[7] 20** | **114** |
| **1984** | **Average** | **8,879** | **1,722** | **3,426** | **197** | **3,229** | **-195** | **-4** | **185** |
| **1985** | **Average** | **8,971** | **1,825** | **3,201** | **118** | **3,083** | **-117** | **67** | **145** |
| 1986 | January | 9,137 | 1,870 | 3,472 | 51 | 3,420 | -35 | -348 | 364 |
| | February | 9,173 | 1,907 | 2,968 | 24 | 2,944 | -35 | -2 | 32 |
| | March | 9,013 | 1,860 | 2,988 | 59 | 2,929 | -49 | -296 | 259 |
| | April | 8,864 | 1,836 | 3,684 | 63 | 3,621 | -63 | 104 | 70 |
| | May | 8,838 | 1,927 | 4,250 | 36 | 4,215 | -35 | 295 | 79 |
| | June | 8,623 | 1,887 | 4,635 | 64 | 4,571 | -64 | 66 | 292 |
| | July | 8,660 | 1,903 | 4,726 | 52 | 4,674 | -52 | -489 | 189 |
| | August | 8,374 | 1,811 | 4,859 | 51 | 4,809 | -51 | 293 | 93 |
| | September | 8,328 | 1,782 | 5,031 | 47 | 4,984 | -47 | -170 | 161 |
| | October | 8,419 | 1,927 | 4,419 | 37 | 4,382 | -36 | -197 | 223 |
| | November | 8,412 | 1,883 | 4,615 | 45 | 4,570 | -65 | 160 | -136 |
| | December | 8,352 | 1,807 | 4,412 | 48 | 4,365 | -68 | 254 | 28 |
| | **Average** | **8,680** | **1,867** | **4,178** | **48** | **4,130** | **-50** | **-28** | **139** |
| 1987 | January | 8,480 | 2,019 | 4,385 | 92 | 4,293 | -108 | -58 | -5 |
| | February | 8,389 | 1,853 | 3,866 | 44 | 3,822 | -64 | 42 | 382 |
| | March | 8,464 | 1,968 | 3,779 | 95 | 3,684 | -106 | -19 | 151 |
| | April | 8,498 | 1,990 | 4,132 | 57 | 4,076 | -67 | 116 | 120 |
| | May | 8,336 | 1,979 | 4,340 | 92 | 4,248 | -101 | 137 | 51 |
| | June | 8,279 | 1,930 | 4,807 | 64 | 4,743 | -69 | -97 | 434 |
| | July | 8,251 | 1,910 | 5,295 | 76 | 5,218 | -91 | 124 | 32 |
| | August | 8,210 | 1,908 | 5,510 | 63 | 5,447 | -63 | -281 | 177 |
| | September | 8,205 | 1,874 | 5,110 | 64 | 5,047 | -64 | -157 | 217 |
| | October | 8,364 | 1,986 | 5,142 | 57 | 5,085 | -57 | -604 | -3 |
| | November | 8,397 | 2,068 | 5,013 | 97 | 4,916 | -97 | -258 | 115 |
| | December | 8,318 | 2,043 | 4,640 | 68 | 4,572 | -68 | 472 | 101 |
| | **Average** | **8,349** | **1,962** | **4,674** | **73** | **4,601** | **-80** | **-49** | **145** |
| 1988 | January | E 8,245 | E 1,999 | 4,619 | 67 | 4,552 | -67 | 123 | 303 |
| | February | E 8,376 | E 2,070 | 4,692 | 49 | 4,643 | -49 | -81 | -21 |
| | March | E 8,347 | E 2,086 | 4,788 | 23 | 4,766 | -26 | -187 | 419 |
| | April | E 8,268 | E 2,029 | 5,126 | 78 | 5,049 | -77 | -117 | 126 |
| | May | E 8,203 | E 2,016 | 5,234 | 22 | 5,213 | -22 | -19 | 251 |
| | June | E 8,158 | E 1,984 | 5,055 | 70 | 4,985 | -70 | -43 | 601 |
| | July | E 8,059 | E 1,960 | 5,006 | 42 | 4,965 | -42 | 312 | 548 |
| | August | E 8,063 | E 2,009 | 5,039 | 26 | 5,013 | -26 | 521 | 385 |
| | September* | RE 7,900 | RE 2,020 | R 5,183 | R 84 | R 5,099 | R -84 | R 157 | R 313 |
| | October** | PE 8,085 | PE 2,044 | E *5,329* | E *60* | E *5,269* | E *-60* | E *-449* | E 389 |
| | **10-Mo. Average** | PE **8,170** | PE **2,021** | E **5,008** | E **52** | E **4,957** | E **-52** | E **23** | E **334** |
| **1987** | **10-Mo. Average** | **8,347** | **1,943** | **4,644** | **71** | **4,573** | **-79** | **-81** | **152** |
| **1986** | **10-Mo. Average** | **8,740** | **1,871** | **4,111** | **48** | **4,063** | **-47** | **-76** | **178** |

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[1] Includes lease condensate.
[2] Stocks are totals as of end of period.
[3] A negative number indicates an increase in stocks and a positive number indicates a decrease.
[4] Strategic Petroleum Reserve.
[5] A balancing item.
[6] Beginning in January 1983, crude oil used directly as fuel is shown as product supplied.
[7] Stocks of Alaskan crude oil in transit were included beginning in January 1981. Stock withdrawals are calculated using new basis stock levels.

See Explanatory Notes 10 and 11.

Footnotes continued on following page.

## Table S2. Crude Oil[1] Supply and Disposition (Continued)

| | | Supply | Disposition | | | | Ending Stocks[2] | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Crude Used Directly[6] | Crude Losses | Refinery Inputs | Exports | Product Supplied[6] | Total | SPR[4] | Other Primary |
| | | Thousand Barrels per Day | | | | | Million Barrels | | |
| 1973 | **Average** | -19 | 13 | 12,431 | 2 | – | 242 | – | 242 |
| 1974 | **Average** | -15 | 13 | 12,133 | 3 | – | 265 | – | 265 |
| 1975 | **Average** | -17 | 13 | 12,442 | 6 | – | 271 | – | 271 |
| 1976 | **Average** | -18 | 15 | 13,416 | 8 | – | 285 | – | 285 |
| 1977 | **Average** | -14 | 16 | 14,602 | 50 | – | 348 | 7 | 340 |
| 1978 | **Average** | -14 | 16 | 14,739 | 158 | – | 376 | 67 | 309 |
| 1979 | **Average** | -13 | 16 | 14,648 | 235 | – | 430 | 91 | 339 |
| 1980 | **Average** | -13 | 15 | 13,481 | 287 | – | [7] 466 | 108 | [7] 358 |
| 1981 | **Average** | -58 | 5 | 12,470 | 228 | – | 594 | 230 | 363 |
| 1982 | **Average** | -59 | 3 | 11,774 | 236 | – | [7] 644 | 294 | [7] 350 |
| 1983 | **Average** | – | 2 | 11,685 | 164 | 66 | 723 | 379 | 344 |
| 1984 | **Average** | – | 2 | 12,044 | 181 | 64 | 796 | 451 | 345 |
| 1985 | **Average** | – | 1 | 12,002 | 204 | 60 | 814 | 493 | 321 |
| 1986 | January | -- | 1 | 12,374 | 159 | 57 | 826 | 494 | 332 |
| | February | -- | (s) | 11,918 | 162 | 56 | 827 | 495 | 332 |
| | March | -- | (s) | 11,652 | 212 | 52 | 838 | 497 | 341 |
| | April | -- | (s) | 12,512 | 94 | 51 | 837 | 499 | 338 |
| | May | -- | (s) | 13,279 | 98 | 49 | 829 | 500 | 329 |
| | June | -- | (s) | 13,261 | 240 | 52 | 828 | 502 | 327 |
| | July | -- | (s) | 12,917 | 65 | 51 | 845 | 503 | 342 |
| | August | -- | (s) | 13,287 | 233 | 48 | 838 | 505 | 333 |
| | September | -- | (s) | 13,097 | 161 | 45 | 844 | 506 | 338 |
| | October | -- | (s) | 12,636 | 151 | 41 | 851 | 508 | 344 |
| | November | -- | (s) | 12,831 | 115 | 41 | 849 | 509 | 339 |
| | December | -- | (s) | 12,777 | 159 | 42 | 843 | 512 | 331 |
| | **Average** | – | (s) | 12,716 | 154 | 49 | – | – | – |
| 1987 | January | -- | 1 | 12,570 | 84 | 41 | 848 | 515 | 333 |
| | February | -- | (s) | 12,290 | 284 | 41 | 849 | 517 | 332 |
| | March | -- | 1 | 12,081 | 150 | 39 | 852 | 520 | 332 |
| | April | -- | (s) | 12,512 | 247 | 41 | 851 | 522 | 329 |
| | May | -- | (s) | 12,653 | 69 | 42 | 850 | 525 | 325 |
| | June | -- | (s) | 13,202 | 116 | 36 | 855 | 527 | 328 |
| | July | -- | (s) | 13,430 | 149 | 32 | 854 | 530 | 324 |
| | August | -- | (s) | 13,380 | 141 | 31 | 864 | 532 | 332 |
| | September | -- | (s) | 13,168 | 116 | 28 | 871 | 534 | 337 |
| | October | -- | (s) | 12,733 | 84 | 25 | 892 | 536 | 356 |
| | November | -- | (s) | 12,981 | 164 | 25 | 902 | 539 | 364 |
| | December | -- | (s) | 13,212 | 220 | 31 | 890 | 541 | 349 |
| | **Average** | – | (s) | 12,854 | 151 | 34 | – | – | – |
| 1988 | January | -- | (s) | 12,975 | 212 | 36 | 888 | 543 | 345 |
| | February | -- | (s) | 12,715 | 149 | 52 | 892 | 544 | 348 |
| | March | -- | (s) | 13,072 | 218 | 52 | 899 | 545 | 354 |
| | April | -- | (s) | 13,167 | 117 | 42 | 904 | 547 | 357 |
| | May | -- | (s) | 13,472 | 141 | 34 | 906 | 548 | 358 |
| | June | -- | (s) | 13,528 | 141 | 32 | 909 | 550 | 359 |
| | July | -- | (s) | 13,663 | 191 | 29 | 901 | 551 | 349 |
| | August | -- | (s) | 13,797 | 155 | 30 | 885 | 552 | 333 |
| | September* | -- | (s) | R 13,309 | R 122 | R 37 | R 883 | R 555 | R 328 |
| | October** | -- | E (s) | E *13,095* | E 170 | E 30 | E *897* | E *556* | E *341* |
| | **10-Mo. Average** | – | E (s) | E 13,283 | E 162 | E 37 | – | – | – |
| 1987 | **10-Mo. Average** | – | (s) | 12,805 | 142 | 35 | – | – | – |
| 1986 | **10-Mo. Average** | – | (s) | 12,698 | 157 | 50 | – | – | – |

Footnotes continued.

R = Revised data. (s) = Less than 500 barrels per day. E = Estimated. PE = Preliminary estimate. RE = Revised estimate.

* See Explanatory Note 9.2.

** Italics denote estimates based upon preliminary data. See Explanatory Note 8.

Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: See the last page of this section.

# Table S3. Crude Oil and Petroleum Product Imports

| | | Imports from OPEC Sources[1] | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Algeria | Libya | Saudi Arabia[2] | United Arab Emirates | Indonesia | Iran | Nigeria | Venezuela | Other OPEC[2] | Total OPEC[3] | Total Arab OPEC[4] |
| | | Thousand Barrels per Day | | | | | | | | | | |
| **1973** | **Average** | **136** | **164** | **486** | **71** | **213** | **223** | **459** | **1,135** | **106** | **2,993** | **915** |
| **1974** | **Average** | **190** | **4** | **461** | **74** | **300** | **469** | **713** | **979** | **88** | **3,280** | **752** |
| **1975** | **Average** | **282** | **232** | **715** | **117** | **390** | **280** | **762** | **702** | **122** | **3,601** | **1,383** |
| **1976** | **Average** | **432** | **453** | **1,230** | **254** | **539** | **298** | **1,025** | **700** | **134** | **5,066** | **2,424** |
| **1977** | **Average** | **559** | **723** | **1,380** | **335** | **541** | **535** | **1,143** | **690** | **287** | **6,193** | **3,185** |
| **1978** | **Average** | **649** | **654** | **1,144** | **385** | **573** | **555** | **919** | **645** | **226** | **5,751** | **2,963** |
| **1979** | **Average** | **636** | **658** | **1,356** | **281** | **420** | **304** | **1,080** | **690** | **212** | **5,637** | **3,056** |
| **1980** | **Average** | **488** | **554** | **1,261** | **172** | **348** | **9** | **857** | **481** | **130** | **4,300** | **2,551** |
| **1981** | **Average** | **311** | **319** | **1,129** | **81** | **366** | **0** | **620** | **406** | **90** | **3,323** | **1,848** |
| **1982** | **Average** | **170** | **26** | **552** | **92** | **248** | **35** | **514** | **412** | **97** | **2,146** | **854** |
| **1983** | **Average** | **240** | **0** | **337** | **30** | **338** | **48** | **302** | **422** | **144** | **1,862** | **632** |
| **1984** | **Average** | **323** | **1** | **325** | **117** | **343** | **10** | **216** | **548** | **166** | **2,049** | **819** |
| **1985** | **Average** | **187** | **4** | **168** | **45** | **314** | **27** | **293** | **605** | **187** | **1,830** | **472** |
| 1986 | January | 215 | 0 | 664 | 11 | 290 | 0 | 278 | 629 | 210 | 2,298 | 976 |
| | February | 157 | 0 | 574 | 0 | 290 | (s) | 204 | 518 | 64 | 1,807 | 757 |
| | March | 260 | 0 | 482 | 0 | 161 | 0 | 328 | 797 | 117 | 2,145 | 798 |
| | April | 275 | 0 | 698 | 21 | 292 | 0 | 319 | 831 | 139 | 2,576 | 1,058 |
| | May | 193 | 0 | 574 | 40 | 314 | 40 | 398 | 899 | 290 | 2,749 | 966 |
| | June | 319 | 0 | 662 | 83 | 353 | 0 | 382 | 772 | 439 | 3,010 | 1,377 |
| | July | 310 | 0 | 738 | 59 | 532 | 66 | 542 | 730 | 330 | 3,307 | 1,357 |
| | August | 363 | 0 | 680 | 37 | 274 | 93 | 606 | 916 | 378 | 3,346 | 1,339 |
| | September | 245 | 0 | 810 | 62 | 341 | 31 | 684 | 856 | 356 | 3,383 | 1,388 |
| | October | 305 | 0 | 697 | 147 | 388 | 0 | 530 | 863 | 346 | 3,276 | 1,387 |
| | November | 311 | 0 | 868 | 34 | 335 | 0 | 483 | 843 | 214 | 3,088 | 1,295 |
| | December | 291 | 0 | 769 | 30 | 251 | 0 | 511 | 841 | 284 | 2,976 | 1,223 |
| | **Average** | **271** | **0** | **685** | **44** | **318** | **19** | **440** | **793** | **265** | **2,837** | **1,162** |
| 1987 | January | 156 | 0 | 875 | 15 | 254 | 0 | 346 | 899 | 218 | 2,764 | 1,184 |
| | February | 307 | 0 | 776 | 54 | 418 | 30 | 256 | 791 | 155 | 2,785 | 1,222 |
| | March | 334 | 0 | 430 | 0 | 317 | 73 | 312 | 702 | 135 | 2,305 | 843 |
| | April | 323 | 0 | 463 | 62 | 236 | 47 | 512 | 710 | 77 | 2,430 | 866 |
| | May | 196 | 0 | 499 | 26 | 297 | 75 | 550 | 913 | 119 | 2,675 | 775 |
| | June | 247 | 0 | 782 | 45 | 261 | 165 | 546 | 808 | 268 | 3,122 | 1,275 |
| | July | 347 | 0 | 756 | 42 | 349 | 237 | 792 | 854 | 157 | 3,533 | 1,264 |
| | August | 250 | 0 | 961 | 103 | 312 | 208 | 732 | 831 | 351 | 3,748 | 1,611 |
| | September | 378 | 0 | 902 | 146 | 242 | 193 | 615 | 821 | 263 | 3,560 | 1,640 |
| | October | 274 | 0 | 1,051 | 111 | 305 | 86 | 518 | 829 | 401 | 3,576 | 1,713 |
| | November | 395 | 0 | 637 | 97 | 219 | 41 | 607 | 771 | 402 | 3,169 | 1,477 |
| | December | 339 | 0 | 876 | 31 | 216 | 23 | 613 | 717 | 220 | 3,033 | 1,415 |
| | **Average** | **295** | **0** | **751** | **61** | **285** | **98** | **535** | **804** | **231** | **3,060** | **1,274** |
| 1988 | January | 312 | 0 | 849 | 61 | 179 | [5] 1 | 406 | 752 | 540 | 3,100 | 1,632 |
| | February | 358 | 0 | 1,265 | 79 | 148 | 0 | 501 | 830 | 214 | 3,394 | 1,883 |
| | March | 259 | 0 | 934 | 6 | 123 | 0 | 541 | 790 | 352 | 3,006 | 1,506 |
| | April | 342 | 0 | 931 | 48 | 166 | 0 | 651 | 812 | 385 | 3,335 | 1,613 |
| | May | 320 | 0 | 1,034 | 34 | 298 | 0 | 488 | 835 | 354 | 3,363 | 1,710 |
| | June | 262 | 0 | 923 | 11 | 158 | 0 | 703 | 839 | 495 | 3,391 | 1,603 |
| | July | 193 | 0 | 1,076 | 43 | 198 | 0 | 614 | 706 | 609 | 3,439 | 1,897 |
| | August | 253 | 0 | 1,161 | 0 | 153 | 0 | 557 | 809 | 669 | 3,603 | 2,024 |
| | September | 274 | 0 | 1,048 | 22 | 231 | 0 | 528 | 803 | 697 | 3,603 | 2,009 |
| | **9-Mo. Average** | **285** | **0** | **1,023** | **33** | **184** | **(s)** | **554** | **797** | **481** | **3,358** | **1,763** |
| **1987** | **9-Mo. Average** | **281** | **0** | **716** | **54** | **298** | **115** | **520** | **815** | **194** | **2,993** | **1,186** |
| **1986** | **9-Mo. Average** | **261** | **0** | **654** | **35** | **316** | **26** | **418** | **774** | **260** | **2,743** | **1,115** |

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[1] Excludes petroleum imported into the United States indirectly from members of the Organization of Petroleum Exporting Countries (OPEC), primarily from Caribbean and West European areas, as petroleum products that were refined from crude oil produced by OPEC.

[2] The other members of OPEC are Ecuador, Gabon, Iraq, Kuwait, and Qatar. Prior to January 1988, imports from the Neutral Zone between Kuwait and Saudi Arabia are included in imports from Saudi Arabia. From January 1988 forward, those imports are included in imports from "Other OPEC".

[3] "Total OPEC" consists of Ecuador, Gabon, Indonesia, Iran, Nigeria, and Venezuela, as well as the Arab members. Imports from the Neutral Zone between Kuwait and Saudi Arabia are included in imports from "Total OPEC".

[4] The Arab members of OPEC are Algeria, Iraq, Kuwait, Libya, Qatar, Saudi Arabia, and the United Arab Emirates.

[5] A small amount of Iranian crude oil entered the United States (defined in this publication as the 50 States and the District of Columbia) in January 1988 from the Virgin Islands. This oil originated in Iran and was exported to the Virgin Islands prior to the signing of Executive Order 12613 on October 29, 1987.

Footnotes continued on following page.

## Table S3. Crude Oil and Petroleum Product Imports (Continued)

| | | Imports from Non-OPEC Sources[6] | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Bahamas | Canada | Mexico | Netherlands Antilles | Trinidad and Tobago | United Kingdom | Puerto Rico | Virgin Islands | Other Non-OPEC | Total Non-OPEC | Total Imports |
| | | Thousand Barrels per Day | | | | | | | | | | |
| **1973** | **Average** | **174** | **1,325** | **16** | **585** | **255** | **15** | **99** | **329** | **465** | **3,263** | **6,256** |
| **1974** | **Average** | **164** | **1,070** | **8** | **511** | **251** | **8** | **90** | **391** | **340** | **2,832** | **6,112** |
| **1975** | **Average** | **152** | **846** | **71** | **332** | **242** | **14** | **90** | **406** | **300** | **2,454** | **6,056** |
| **1976** | **Average** | **118** | **599** | **87** | **275** | **274** | **31** | **88** | **422** | **353** | **2,247** | **7,313** |
| **1977** | **Average** | **171** | **517** | **179** | **211** | **289** | **126** | **105** | **466** | **550** | **2,614** | **8,807** |
| **1978** | **Average** | **160** | **467** | **318** | **229** | **253** | **180** | **94** | **429** | **484** | **2,613** | **8,363** |
| **1979** | **Average** | **147** | **538** | **439** | **231** | **190** | **202** | **92** | **431** | **548** | **2,819** | **8,456** |
| **1980** | **Average** | **78** | **455** | **533** | **225** | **176** | **176** | **88** | **388** | **491** | **2,609** | **6,909** |
| **1981** | **Average** | **74** | **447** | **522** | **197** | **133** | **375** | **62** | **327** | **534** | **2,672** | **5,996** |
| **1982** | **Average** | **65** | **482** | **685** | **175** | **112** | **456** | **50** | **316** | **627** | **2,968** | **5,113** |
| **1983** | **Average** | **125** | **547** | **826** | **189** | **96** | **382** | **40** | **282** | **701** | **3,189** | **5,051** |
| **1984** | **Average** | **88** | **630** | **748** | **188** | **94** | **402** | **42** | **294** | **902** | **3,388** | **5,437** |
| **1985** | **Average** | **40** | **770** | **816** | **40** | **113** | **310** | **28** | **247** | **873** | **3,237** | **5,067** |
| **1986** | January | 62 | 823 | 681 | 58 | 108 | 333 | 21 | 326 | 862 | 3,275 | 5,573 |
| | February | 33 | 690 | 557 | 11 | 85 | 218 | 18 | 309 | 949 | 2,870 | 4,676 |
| | March | 18 | 750 | 616 | 27 | 79 | 178 | 25 | 186 | 688 | 2,567 | 4,712 |
| | April | 34 | 798 | 694 | 13 | 111 | 188 | 23 | 209 | 793 | 2,863 | 5,439 |
| | May | 32 | 881 | 743 | 37 | 130 | 365 | 27 | 237 | 1,199 | 3,651 | 6,400 |
| | June | 29 | 753 | 884 | 17 | 167 | 569 | 30 | 233 | 1,157 | 3,838 | 6,848 |
| | July | 44 | 763 | 850 | 25 | 131 | 353 | 29 | 237 | 1,202 | 3,634 | 6,942 |
| | August | 39 | 801 | 738 | 12 | 133 | 584 | 7 | 214 | 1,294 | 3,822 | 7,168 |
| | September | 15 | 801 | 615 | 17 | 162 | 437 | 23 | 291 | 1,345 | 3,706 | 7,090 |
| | October | 38 | 842 | 680 | 26 | 112 | 173 | 21 | 215 | 1,043 | 3,151 | 6,427 |
| | November | 39 | 960 | 565 | 53 | 129 | 448 | 21 | 179 | 1,111 | 3,504 | 6,592 |
| | December | 57 | 809 | 746 | 7 | 148 | 351 | 12 | 291 | 1,304 | 3,724 | 6,700 |
| | **Average** | **37** | **807** | **699** | **25** | **125** | **350** | **21** | **244** | **1,080** | **3,387** | **6,224** |
| **1987** | January | 59 | 799 | 689 | 29 | 100 | 384 | 33 | 327 | 1,170 | 3,589 | 6,353 |
| | February | 56 | 783 | 692 | 23 | 127 | 260 | 24 | 296 | 938 | 3,199 | 5,984 |
| | March | 43 | 738 | 721 | 14 | 124 | 322 | 17 | 247 | 1,262 | 3,489 | 5,794 |
| | April | 43 | 818 | 679 | 12 | 123 | 485 | 24 | 259 | 1,037 | 3,481 | 5,911 |
| | May | 31 | 884 | 541 | 33 | 117 | 392 | 21 | 214 | 1,164 | 3,398 | 6,073 |
| | June | 22 | 912 | 664 | 13 | 114 | 377 | 21 | 281 | 1,242 | 3,646 | 6,769 |
| | July | 46 | 901 | 680 | 71 | 98 | 354 | 17 | 288 | 1,598 | 4,055 | 7,588 |
| | August | 27 | 841 | 577 | 51 | 100 | 289 | 20 | 274 | 1,526 | 3,706 | 7,454 |
| | September | 48 | 846 | 705 | 42 | 105 | 259 | 25 | 271 | 1,318 | 3,618 | 7,178 |
| | October | 26 | 938 | 697 | 16 | 88 | 321 | 17 | 250 | 1,138 | 3,492 | 7,068 |
| | November | 31 | 827 | 627 | 14 | 111 | 456 | 15 | 235 | 1,585 | 3,899 | 7,068 |
| | December | 10 | 883 | 591 | 24 | 73 | 324 | 23 | 327 | 1,543 | 3,800 | 6,833 |
| | **Average** | **37** | **848** | **655** | **29** | **106** | **352** | **21** | **272** | **1,296** | **3,617** | **6,678** |
| **1988** | January | 49 | 953 | 767 | 40 | 104 | 312 | 29 | 341 | 1,205 | 3,800 | 6,900 |
| | February | 58 | 995 | 699 | 21 | 93 | 313 | 16 | 200 | 1,206 | 3,601 | 6,995 |
| | March | 45 | 989 | 745 | 30 | 89 | 461 | 22 | 180 | 1,160 | 3,720 | 6,727 |
| | April | 12 | 975 | 674 | 31 | 82 | 581 | 29 | 193 | 1,137 | 3,714 | 7,050 |
| | May | 17 | 990 | 718 | 38 | 102 | 383 | 20 | 243 | 1,345 | 3,855 | 7,218 |
| | June | 25 | 1,022 | 765 | 19 | 112 | 232 | 13 | 212 | 1,094 | 3,494 | 6,885 |
| | July | 15 | 962 | 723 | 35 | 96 | 208 | 22 | 215 | 1,280 | 3,556 | 6,994 |
| | August | 12 | 1,003 | 692 | 20 | 97 | 104 | 7 | 172 | 1,465 | 3,571 | 7,174 |
| | September | 25 | 920 | 842 | 13 | 95 | 148 | 29 | 236 | 1,307 | 3,617 | 7,220 |
| | **9-Mo. Average** | **29** | **979** | **736** | **28** | **97** | **304** | **21** | **222** | **1,245** | **3,660** | **7,018** |
| **1987** | **9-Mo. Average** | **42** | **836** | **660** | **32** | **112** | **347** | **22** | **273** | **1,255** | **3,580** | **6,573** |
| **1986** | **9-Mo. Average** | **34** | **786** | **710** | **24** | **123** | **359** | **23** | **249** | **1,055** | **3,363** | **6,106** |

Footnotes continued.

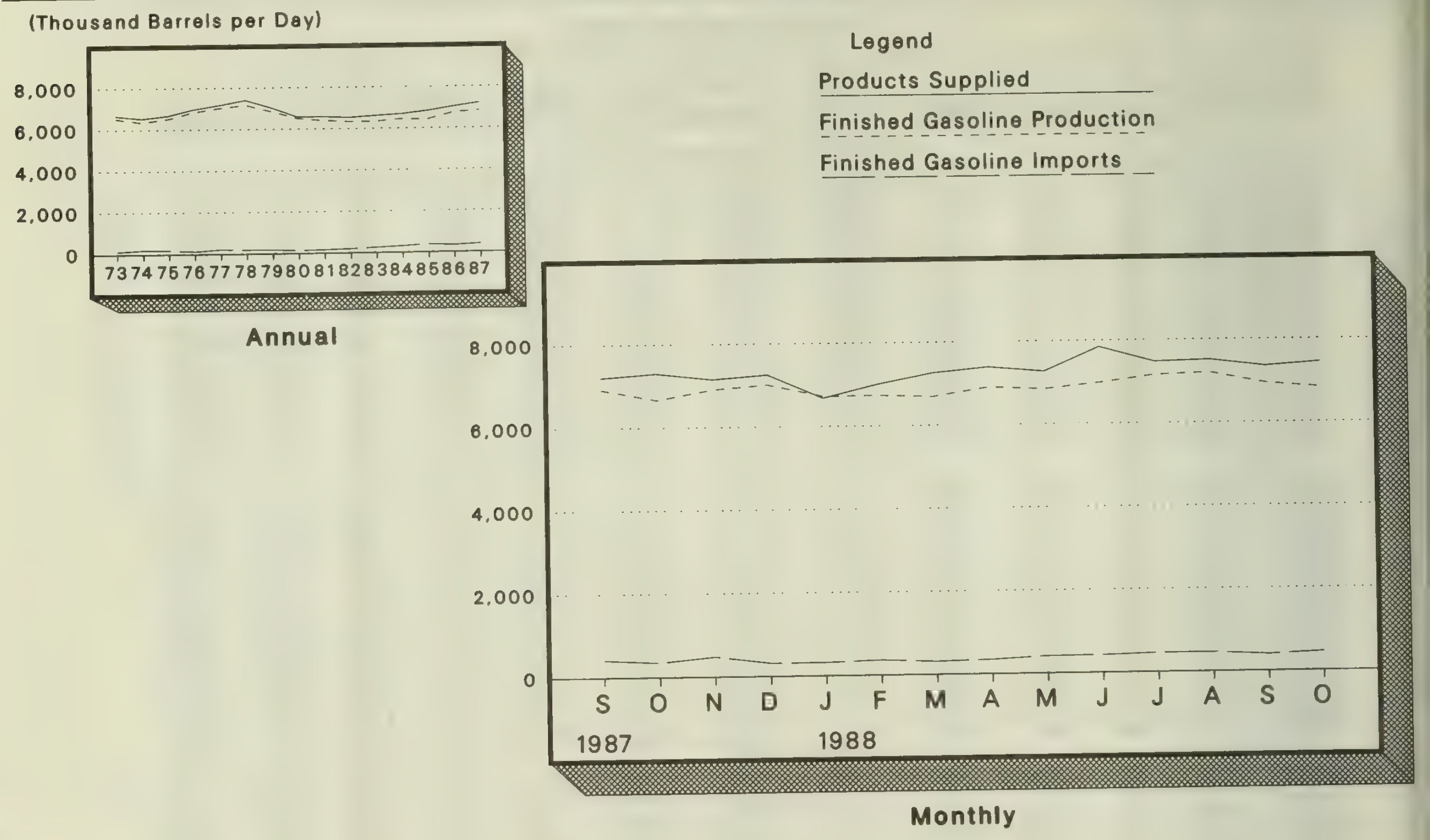
[6] Includes petroleum imported into the United States indirectly from members of OPEC, primarily from Caribbean and West European areas as petroleum products that were refined from crude oil produced by OPEC.

(s) = Less than 500 barrels per day.

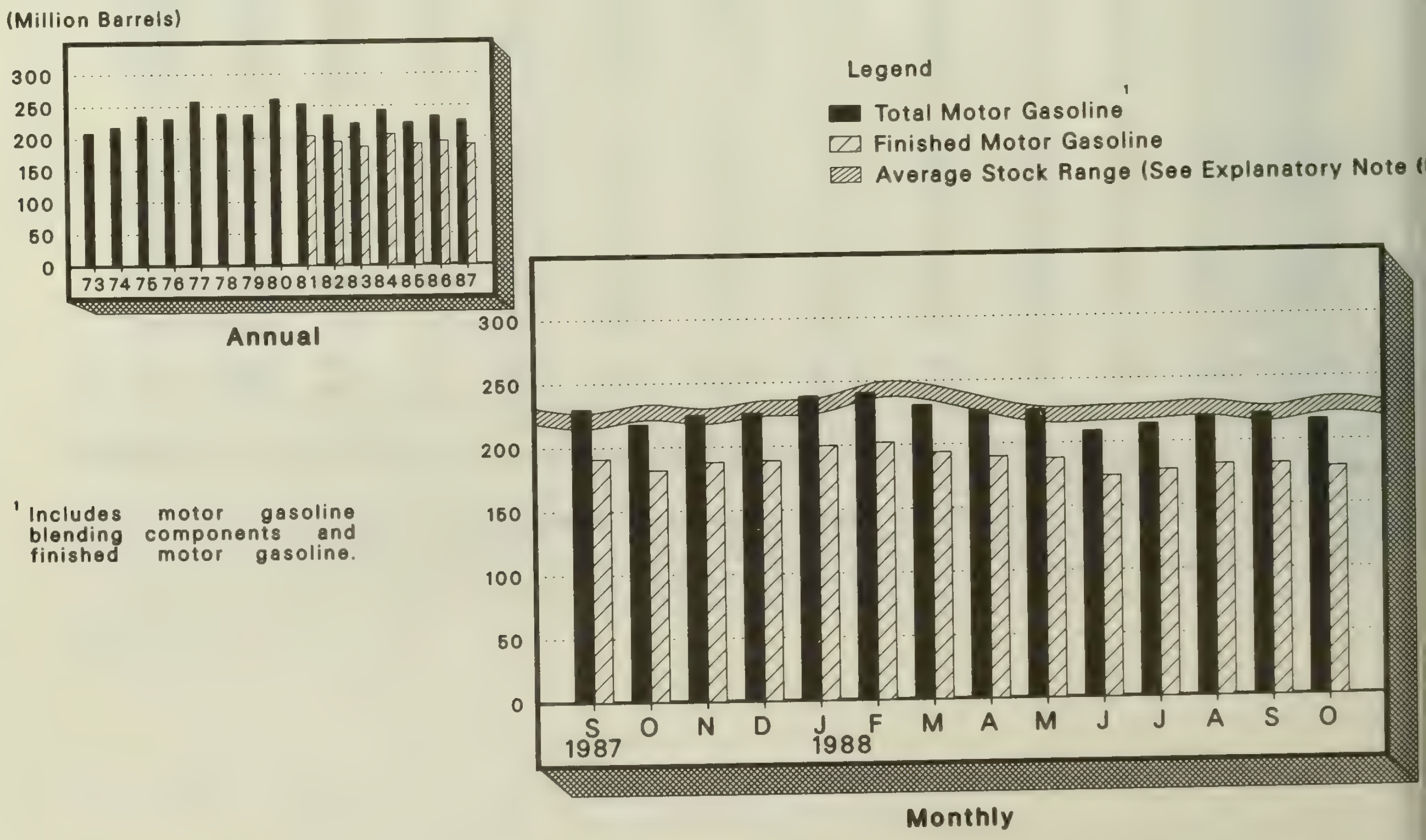
Notes: • Beginning in October 1977, Strategic Petroleum Reserve imports are included. • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: See the last page of this section.

## Figure S5. Finished Motor Gasoline Supply and Disposition



## Figure S6. Motor Gasoline Ending Stocks



[1] Includes motor gasoline blending components and finished motor gasoline.

# Table S4. Finished Motor Gasoline Supply and Disposition

| | | Supply | | | Disposition | | | | Ending Stocks [1] | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Product Supplied | | | | |
| | | Total Production | Imports [2] | Stock Withdrawal [2,3] | Exports | Total [4] | Unleaded | Unleaded | Total Motor Gasoline [5] | Finished Motor Gasoline |
| | | Thousand Barrels per Day | | | | | | Percent of Total | Million Barrels | |
| **1973** | **Average** | **6,535** | **134** | **9** | **4** | **6,674** | **--** | **--** | **209** | **--** |
| **1974** | **Average** | **6,360** | **204** | **-24** | **2** | **6,537** | **--** | **--** | **[6] 218** | **--** |
| **1975** | **Average** | **6,520** | **184** | **[6] -28** | **2** | **6,675** | **--** | **--** | **235** | **--** |
| **1976** | **Average** | **6,841** | **131** | **10** | **3** | **6,978** | **--** | **--** | **231** | **--** |
| **1977** | **Average** | **7,033** | **217** | **-72** | **2** | **7,177** | **1,976** | **27.5** | **258** | **--** |
| **1978** | **Average** | **7,169** | **190** | **54** | **1** | **7,412** | **2,521** | **34.0** | **238** | **--** |
| **1979** | **Average** | **6,852** | **181** | **2** | **(s)** | **7,034** | **2,798** | **39.8** | **237** | **--** |
| **1980** | **Average** | **6,506** | **140** | **-66** | **1** | **6,579** | **3,067** | **46.6** | **[6] 261** | **--** |
| **1981** | **Average[7]** | **6,405** | **157** | **[6] 28** | **2** | **6,588** | **3,264** | **49.5** | **253** | **--** |
| **1982** | **Average** | **6,338** | **197** | **25** | **20** | **6,539** | **3,409** | **52.1** | **[6] 235** | **--** |
| **1983** | **Average** | **6,340** | **247** | **[6] 45** | **10** | **6,622** | **3,647** | **55.1** | **222** | **186** |
| **1984** | **Average** | **6,453** | **299** | **-54** | **6** | **6,693** | **3,987** | **59.6** | **243** | **205** |
| **1985** | **Average** | **6,419** | **381** | **41** | **10** | **6,831** | **4,406** | **64.5** | **223** | **190** |
| **1986** | January | 6,522 | 332 | -347 | 6 | 6,502 | 4,404 | 67.7 | 238 | 201 |
| | February | 6,302 | 334 | -156 | 11 | 6,469 | 4,365 | 67.5 | 244 | 205 |
| | March | 6,061 | 224 | 691 | 21 | 6,955 | 4,678 | 67.3 | 219 | 184 |
| | April | 6,498 | 291 | 338 | 23 | 7,105 | 4,783 | 67.3 | 207 | 174 |
| | May | 7,095 | 471 | -450 | 9 | 7,106 | 4,729 | 66.5 | 221 | 188 |
| | June | 7,101 | 392 | -265 | 18 | 7,209 | 4,914 | 68.2 | 230 | 196 |
| | July | 6,956 | 337 | 189 | 47 | 7,436 | 5,182 | 69.7 | 224 | 190 |
| | August | 7,092 | 303 | 83 | 43 | 7,435 | 5,138 | 69.1 | 222 | 187 |
| | September | 6,891 | 303 | -289 | 40 | 6,864 | 4,813 | 70.1 | 234 | 196 |
| | October | 6,616 | 322 | 372 | 61 | 7,250 | 5,086 | 70.1 | 222 | 184 |
| | November | 6,895 | 280 | -200 | 96 | 6,879 | 4,918 | 71.5 | 229 | 190 |
| | December | 6,970 | 320 | -122 | 24 | 7,143 | 5,193 | 72.7 | 233 | 194 |
| | **Average** | **6,752** | **326** | **-11** | **33** | **7,034** | **4,854** | **69.0** | -- | -- |
| **1987** | January | 6,714 | 393 | -528 | 44 | 6,535 | 4,822 | 73.8 | 251 | 211 |
| | February | 6,365 | 309 | 144 | 22 | 6,796 | 5,068 | 74.6 | 250 | 207 |
| | March | 6,569 | 364 | 51 | 20 | 6,964 | 5,193 | 74.6 | 248 | 205 |
| | April | 6,850 | 374 | 133 | 42 | 7,314 | 5,405 | 73.9 | 242 | 201 |
| | May | 6,991 | 354 | 164 | 48 | 7,460 | 5,569 | 74.7 | 235 | 196 |
| | June | 7,089 | 385 | 111 | 46 | 7,539 | 5,678 | 75.3 | 230 | 193 |
| | July | 7,043 | 452 | 119 | 33 | 7,581 | 5,740 | 75.7 | 226 | 189 |
| | August | 6,933 | 396 | 29 | 19 | 7,338 | 5,656 | 77.1 | 226 | 188 |
| | September | 6,921 | 421 | -107 | 30 | 7,205 | 5,536 | 76.8 | 230 | 191 |
| | October | 6,668 | 356 | 302 | 21 | 7,305 | 5,636 | 77.1 | 218 | 182 |
| | November | 6,907 | 484 | -208 | 32 | 7,151 | 5,589 | 78.2 | 225 | 188 |
| | December | 7,015 | 320 | -24 | 59 | 7,251 | 5,715 | 78.8 | 226 | 189 |
| | **Average** | **6,841** | **384** | **15** | **35** | **7,206** | **5,470** | **75.9** | – | – |
| **1988** | January | 6,723 | 324 | -361 | 8 | 6,679 | 5,392 | 80.7 | 239 | 200 |
| | February | 6,736 | 365 | -78 | 18 | 7,004 | 5,571 | 79.5 | 241 | 202 |
| | March | 6,695 | 318 | 271 | 18 | 7,265 | 5,845 | 80.4 | 231 | 194 |
| | April | 6,906 | 349 | 148 | 18 | 7,384 | 5,946 | 80.5 | 226 | 190 |
| | May | 6,847 | 415 | 34 | 28 | 7,269 | 5,813 | 80.0 | 226 | 188 |
| | June | 6,983 | 424 | 490 | 59 | 7,838 | 6,356 | 81.1 | 209 | 174 |
| | July | 7,159 | 461 | -135 | 12 | 7,473 | 6,126 | 82.0 | 214 | 178 |
| | August | 7,204 | 465 | -142 | 15 | 7,511 | 6,191 | 82.4 | 219 | 182 |
| | September* | R 6,948 | R 403 | R 14 | R 16 | R 7,349 | R 6,066 | R 82.5 | R 221 | R 182 |
| | October** | E *6,838* | E *459* | E *159* | E 14 | E *7,442* | E *6,194* | E *83.2* | E *216* | E *179* |
| | **10-Mo. Average** | E **6,905** | E **399** | E **39** | E **20** | E **7,322** | E **5,951** | E **81.3** | – | – |
| **1987** | **10-Mo. Average** | **6,817** | **381** | **41** | **33** | **7,206** | **5,433** | **75.4** | – | – |
| **1986** | **10-Mo. Average** | **6,716** | **331** | **19** | **28** | **7,038** | **4,813** | **68.4** | – | – |

[1] Stocks are totals as of end of period.

[2] Beginning in 1981, excludes blending components.

[3] A negative number indicates an increase in stocks and a positive number indicates a decrease.

[4] Includes gasohol.

[5] Includes motor gasoline blending components.

[6] In January 1975, 1981, and 1983, numerous respondents were added to surveys affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10.

[7] Beginning in January 1981, survey forms were modified. See Explanatory Note 12.

R = Revised data. (s) = Less than 500 barrels per day. E = Estimated.

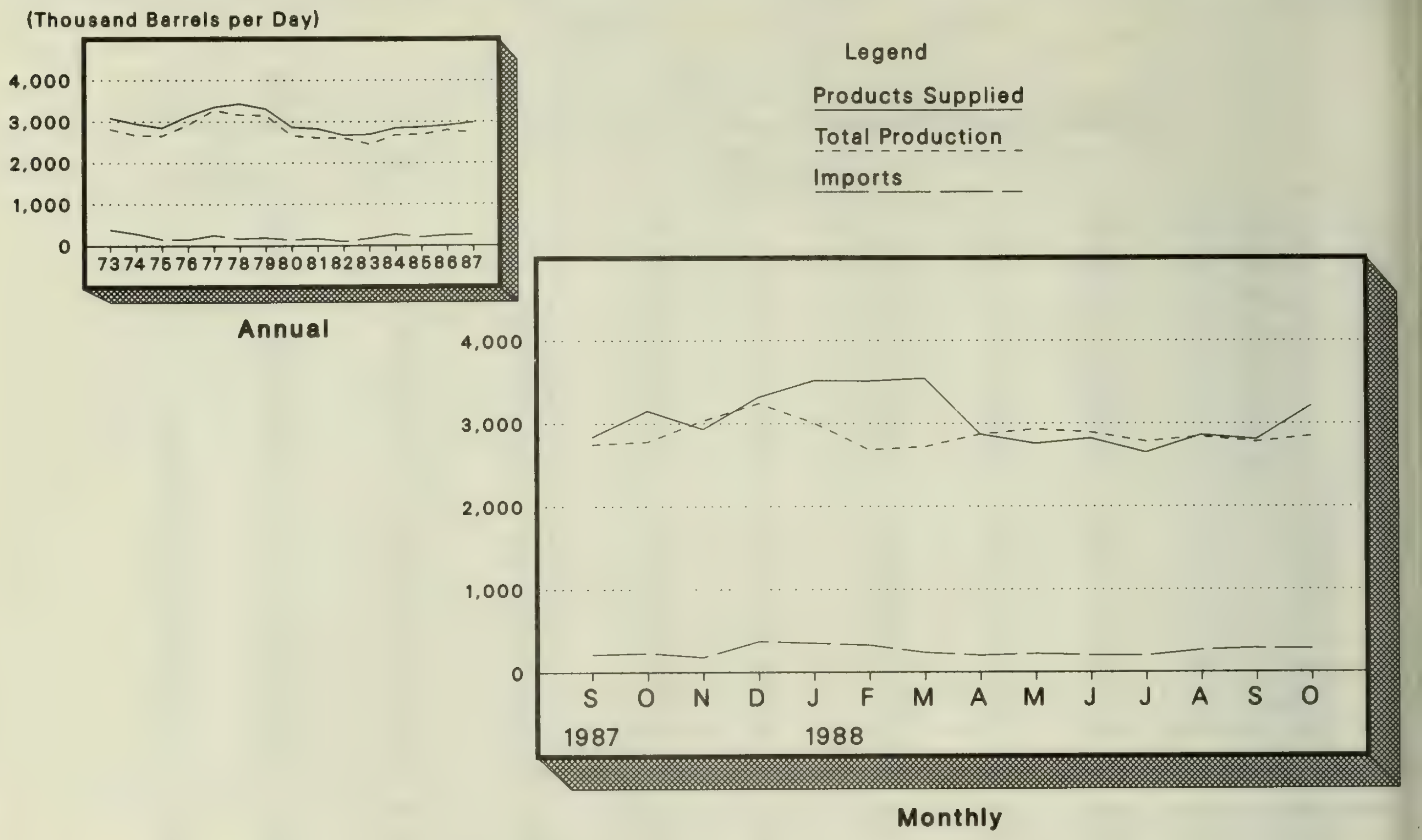
* See Explanatory Note 9.3.

** Italics denote estimates based upon preliminary data. See Explanatory Note 8.

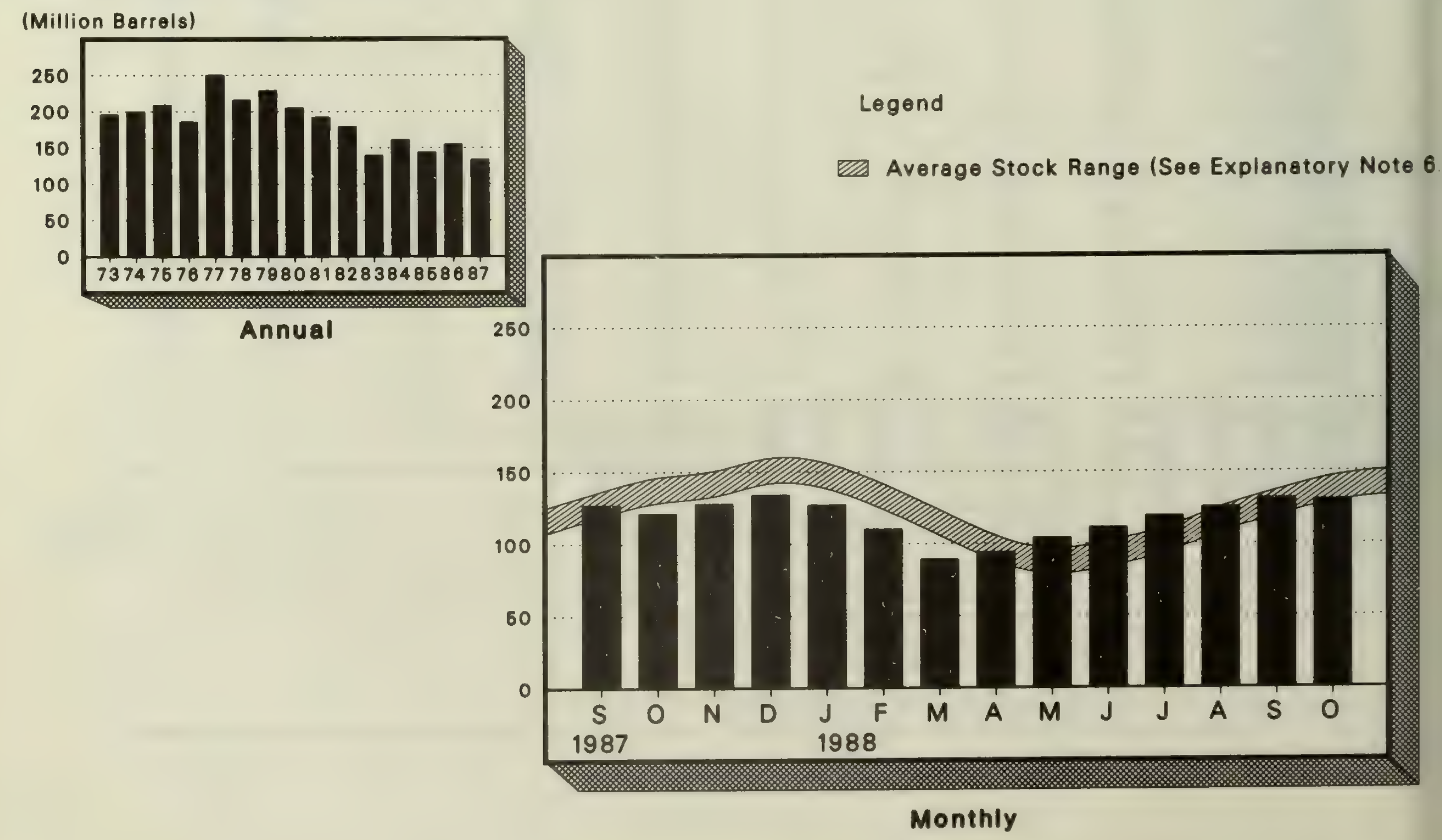
Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: See the last page of this section.

## Figure S7. Distillate Fuel Oil Supply and Disposition



## Figure S8. Distillate Fuel Oil Ending Stocks



# Table S5. Distillate Fuel Oil Supply and Disposition

| | | Supply | | | | Disposition | | |
|---|---|---|---|---|---|---|---|---|
| | | Total Production | Imports | Stock Withdrawal [1] | Crude Used Directly [2] | Exports | Product Supplied [2] | Ending Stocks [3] |
| | | Thousand Barrels per Day | | | | | | Million Barrels |
| 1973 | **Average** | **2,822** | **392** | -115 | 2 | 9 | 3,092 | 196 |
| 1974 | **Average** | **2,669** | **289** | -9 | 2 | 2 | 2,948 | [4] 200 |
| 1975 | **Average** | **2,654** | **155** | [4] 40 | 2 | 1 | 2,851 | 209 |
| 1976 | **Average** | **2,924** | **146** | 62 | 1 | 1 | 3,133 | 186 |
| 1977 | **Average** | **3,278** | **250** | -176 | 1 | 1 | 3,352 | 250 |
| 1978 | **Average** | **3,167** | **173** | 93 | 1 | 3 | 3,432 | 216 |
| 1979 | **Average** | **3,153** | **193** | -34 | 1 | 3 | 3,311 | 229 |
| 1980 | **Average** | **2,662** | **142** | 64 | 1 | 3 | 2,866 | [4] 205 |
| 1981 | **Average**[5] | **2,613** | **173** | [4] 38 | 10 | 5 | 2,829 | 192 |
| 1982 | **Average** | **2,606** | **93** | 35 | 10 | 74 | 2,671 | [4] 179 |
| 1983 | **Average** | **2,456** | **174** | [4] 124 | – | 64 | 2,690 | 140 |
| 1984 | **Average** | **2,681** | **272** | -57 | – | 51 | 2,845 | 161 |
| 1985 | **Average** | **2,687** | **200** | 48 | -- | 67 | 2,868 | 144 |
| 1986 | January | 2,899 | 325 | 232 | -- | 126 | 3,330 | 136 |
| | February | 2,563 | 169 | 860 | -- | 176 | 3,416 | 112 |
| | March | 2,643 | 217 | 438 | -- | 131 | 3,168 | 99 |
| | April | 2,788 | 147 | 97 | -- | 128 | 2,904 | 96 |
| | May | 2,858 | 149 | -95 | -- | 149 | 2,762 | 99 |
| | June | 2,729 | 169 | -301 | -- | 53 | 2,544 | 108 |
| | July | 2,710 | 313 | -355 | -- | 75 | 2,592 | 119 |
| | August | 2,922 | 370 | -607 | -- | 64 | 2,621 | 138 |
| | September | 2,865 | 262 | -489 | -- | 98 | 2,540 | 152 |
| | October | 2,717 | 243 | 25 | -- | 74 | 2,912 | 152 |
| | November | 2,917 | 254 | -222 | -- | 72 | 2,877 | 158 |
| | December | 2,943 | 339 | 102 | -- | 55 | 3,329 | 155 |
| | **Average** | **2,798** | **247** | **-31** | **--** | **100** | **2,914** | -- |
| 1987 | January | 2,759 | 222 | 444 | -- | 115 | 3,310 | 141 |
| | February | 2,556 | 253 | 629 | -- | 93 | 3,345 | 124 |
| | March | 2,421 | 297 | 464 | -- | 67 | 3,116 | 109 |
| | April | 2,553 | 192 | 300 | -- | 53 | 2,991 | 100 |
| | May | 2,563 | 203 | -31 | -- | 51 | 2,684 | 101 |
| | June | 2,689 | 265 | -104 | -- | 61 | 2,790 | 104 |
| | July | 2,700 | 381 | -329 | -- | 38 | 2,713 | 115 |
| | August | 2,706 | 222 | -327 | -- | 47 | 2,553 | 125 |
| | September | 2,748 | 222 | -68 | -- | 64 | 2,838 | 127 |
| | October | 2,780 | 237 | 187 | -- | 53 | 3,151 | 121 |
| | November | 3,035 | 187 | -234 | -- | 56 | 2,932 | 128 |
| | December | 3,242 | 378 | -209 | -- | 92 | 3,318 | 134 |
| | **Average** | **2,731** | **255** | **56** | **--** | **66** | **2,976** | -- |
| 1988 | January | 3,008 | 355 | 236 | -- | 82 | 3,517 | 127 |
| | February | 2,683 | 330 | 604 | -- | 107 | 3,511 | 110 |
| | March | 2,720 | 243 | 656 | -- | 74 | 3,544 | 89 |
| | April | 2,869 | 208 | -166 | -- | 42 | 2,870 | 94 |
| | May | 2,931 | 228 | -328 | -- | 74 | 2,757 | 104 |
| | June | 2,893 | 209 | -207 | -- | 76 | 2,820 | 111 |
| | July | 2,783 | 205 | -283 | -- | 58 | 2,647 | 119 |
| | August | 2,844 | 270 | -186 | -- | 70 | 2,860 | 125 |
| | September* | R 2,779 | R 292 | R -193 | -- | R 72 | R 2,806 | R 131 |
| | October** | E *2,847* | E *286* | E *146* | -- | E 65 | E *3,214* | E *130* |
| | **10-Mo. Average** | **E 2,837** | **E 263** | **E 26** | **--** | **E 72** | **E 3,054** | -- |
| **1987** | **10-Mo. Average** | **2,648** | **249** | **112** | **--** | **64** | **2,946** | -- |
| **1986** | **10-Mo. Average** | **2,771** | **237** | **-26** | **--** | **107** | **2,876** | -- |

[1] A negative number indicates an increase in stocks and a positive number indicates a decrease.

[2] Beginning in January 1983, product supplied for distillate fuel oil does not include crude oil used directly. See Explanatory Note 4.

[3] Stocks are totals as of end of period.

[4] In January 1975, 1981, and 1983, numerous respondents were added to surveys affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10.

[5] Beginning in January 1981, survey forms were modified. See Explanatory Note 12.

R = Revised data. (s) = Less than 500 barrels per day. E = Estimated.

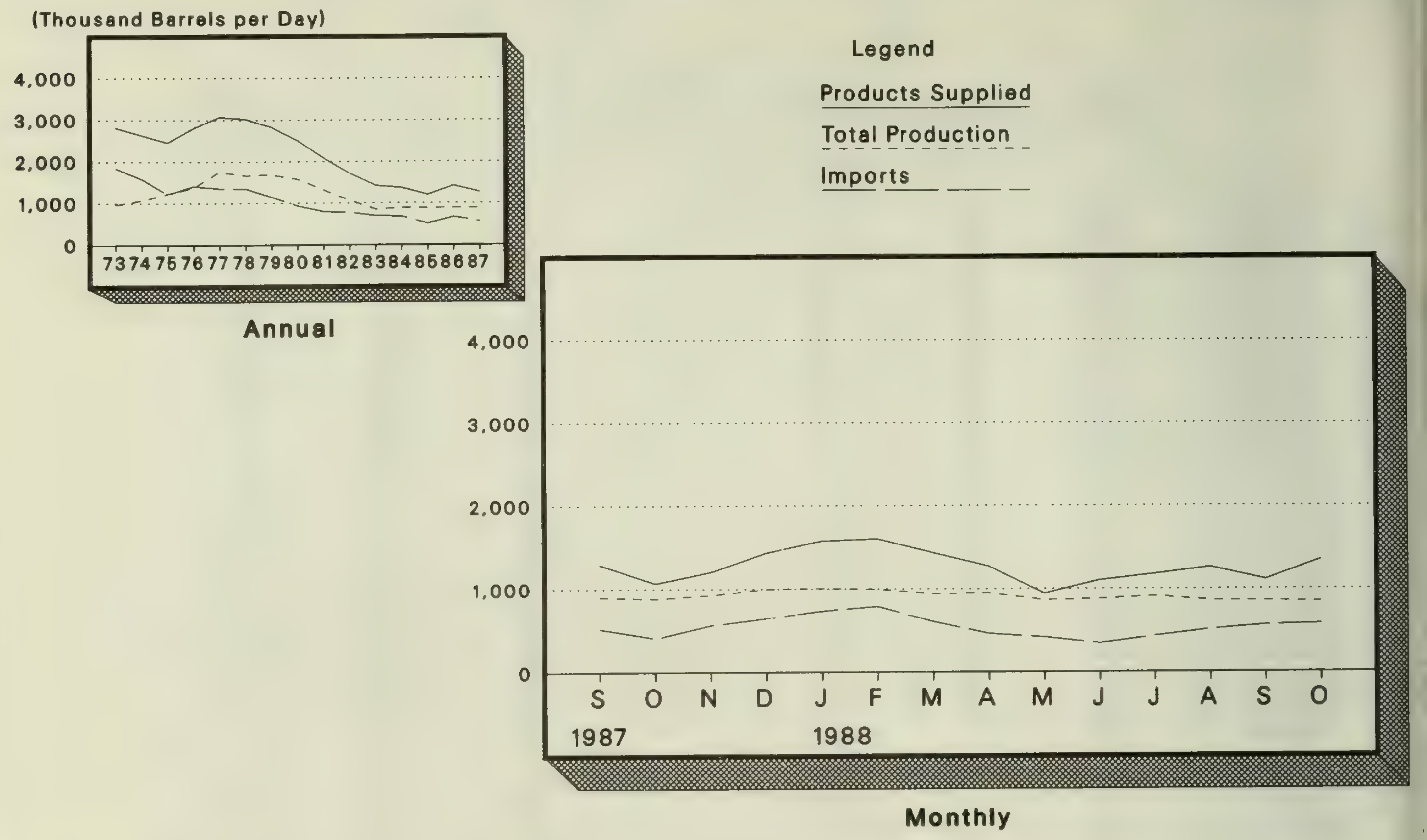
* See Explanatory Note 9.4.

** Italics denote estimates based upon preliminary data. See Explanatory Note 8.

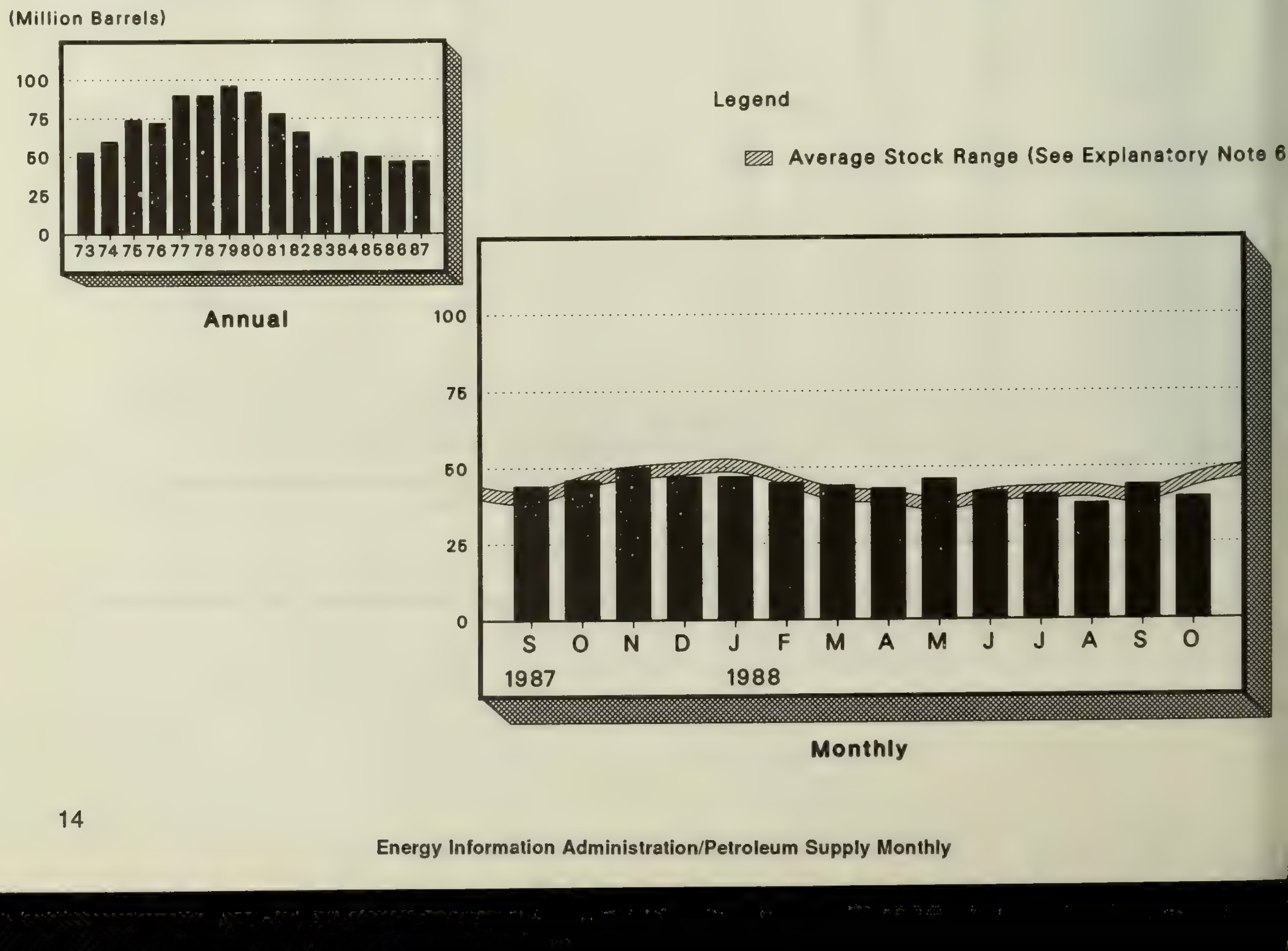
Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: See the last page of this section.

## Figure S9. Residual Fuel Oil Supply and Disposition



## Figure S10. Residual Fuel Oil Ending Stocks



## Table S6. Residual Fuel Oil Supply and Disposition

| | | Supply | | | | Disposition | | |
|---|---|---|---|---|---|---|---|---|
| | | Total Production | Imports | Stock Withdrawal [1] | Crude Used Directly [2] | Exports | Product Supplied [2] | Ending Stocks [3] |
| | | Thousand Barrels per Day | | | | | | Million Barrels |
| 1973 | **Average** | **971** | **1,853** | **5** | **17** | **23** | **2,822** | **53** |
| 1974 | **Average** | **1,070** | **1,587** | **-17** | **13** | **14** | **2,639** | **[4] 60** |
| 1975 | **Average** | **1,235** | **1,223** | **[4] 2** | **15** | **15** | **2,462** | **74** |
| 1976 | **Average** | **1,377** | **1,413** | **5** | **17** | **12** | **2,801** | **72** |
| 1977 | **Average** | **1,754** | **1,359** | **-48** | **13** | **6** | **3,071** | **90** |
| 1978 | **Average** | **1,667** | **1,355** | **-1** | **13** | **13** | **3,023** | **90** |
| 1979 | **Average** | **1,687** | **1,151** | **-15** | **12** | **9** | **2,826** | **96** |
| 1980 | **Average** | **1,580** | **939** | **10** | **12** | **33** | **2,508** | **[4] 92** |
| 1981 | **Average[5]** | **1,321** | **800** | **[4] 37** | **48** | **118** | **2,088** | **78** |
| 1982 | **Average** | **1,070** | **776** | **32** | **48** | **209** | **1,716** | **[4] 66** |
| 1983 | **Average** | **852** | **699** | **[4] 55** | **–** | **185** | **1,421** | **49** |
| 1984 | **Average** | **891** | **681** | **-12** | **–** | **190** | **1,369** | **53** |
| 1985 | **Average** | **882** | **510** | **7** | **–** | **197** | **1,202** | **50** |
| 1986 | January | 940 | 622 | 56 | -- | 211 | 1,407 | 49 |
| | February | 856 | 604 | 200 | -- | 183 | 1,478 | 43 |
| | March | 813 | 626 | 108 | -- | 113 | 1,435 | 40 |
| | April | 933 | 545 | 127 | -- | 202 | 1,402 | 36 |
| | May | 913 | 675 | -114 | -- | 129 | 1,345 | 39 |
| | June | 818 | 712 | -111 | -- | 43 | 1,377 | 43 |
| | July | 850 | 673 | 75 | -- | 90 | 1,508 | 40 |
| | August | 896 | 793 | -29 | -- | 174 | 1,485 | 41 |
| | September | 854 | 641 | -89 | -- | 110 | 1,296 | 44 |
| | October | 827 | 635 | -59 | -- | 144 | 1,259 | 46 |
| | November | 975 | 574 | -15 | -- | 143 | 1,391 | 46 |
| | December | 987 | 913 | -37 | -- | 224 | 1,638 | 47 |
| | **Average** | **889** | **669** | **8** | **--** | **147** | **1,418** | **--** |
| 1987 | January | 920 | 701 | 81 | -- | 198 | 1,504 | 45 |
| | February | 825 | 668 | 243 | -- | 221 | 1,515 | 38 |
| | March | 863 | 559 | -38 | -- | 150 | 1,234 | 39 |
| | April | 831 | 476 | 114 | -- | 239 | 1,182 | 36 |
| | May | 813 | 505 | -145 | -- | 144 | 1,029 | 40 |
| | June | 864 | 481 | -33 | -- | 105 | 1,207 | 41 |
| | July | 901 | 721 | -108 | -- | 175 | 1,339 | 45 |
| | August | 882 | 512 | -32 | -- | 185 | 1,176 | 46 |
| | September | 904 | 526 | 42 | -- | 177 | 1,296 | 44 |
| | October | 887 | 414 | -39 | -- | 194 | 1,069 | 46 |
| | November | 928 | 568 | -145 | -- | 146 | 1,205 | 50 |
| | December | 1,001 | 650 | 83 | -- | 300 | 1,434 | 47 |
| | **Average** | **885** | **565** | **(s)** | **--** | **186** | **1,264** | **--** |
| 1988 | January | 1,009 | 737 | 23 | -- | 190 | 1,578 | 47 |
| | February | 997 | 792 | 40 | -- | 229 | 1,601 | 45 |
| | March | 944 | 610 | 45 | -- | 165 | 1,434 | 44 |
| | April | 951 | 465 | 27 | -- | 170 | 1,272 | 43 |
| | May | 866 | 423 | -81 | -- | 263 | 945 | 46 |
| | June | 881 | 349 | 121 | -- | 249 | 1,102 | 42 |
| | July | 913 | 436 | 34 | -- | 206 | 1,177 | 41 |
| | August | 863 | 515 | 104 | -- | 225 | 1,258 | 38 |
| | September* | R 859 | R 566 | -213 | -- | R 100 | R 1,112 | 44 |
| | October** | E *850* | E *582* | E *135* | -- | E 217 | E *1,350* | E *40* |
| | **10-Mo. Average** | **E 913** | **E 547** | **E 24** | **--** | **E 202** | **E 1,282** | **--** |
| 1987 | **10-Mo. Average** | **869** | **556** | **6** | **--** | **178** | **1,253** | **--** |
| 1986 | **10-Mo. Average** | **870** | **653** | **15** | **--** | **140** | **1,399** | **--** |

[1] A negative number indicates an increase in stocks and a positive number indicates a decrease.

[2] Beginning in January 1983, product supplied for residual fuel oil does not include crude oil used directly. See Explanatory Note 4.

[3] Stocks are totals as of end of period.

[4] In January 1975, 1981, and 1983, numerous respondents were added to surveys affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10.

[5] Beginning in January 1981, survey forms were modified. See Explanatory Note 12.

R = Revised data. (s) = Less than 500 barrels per day. E = Estimated.

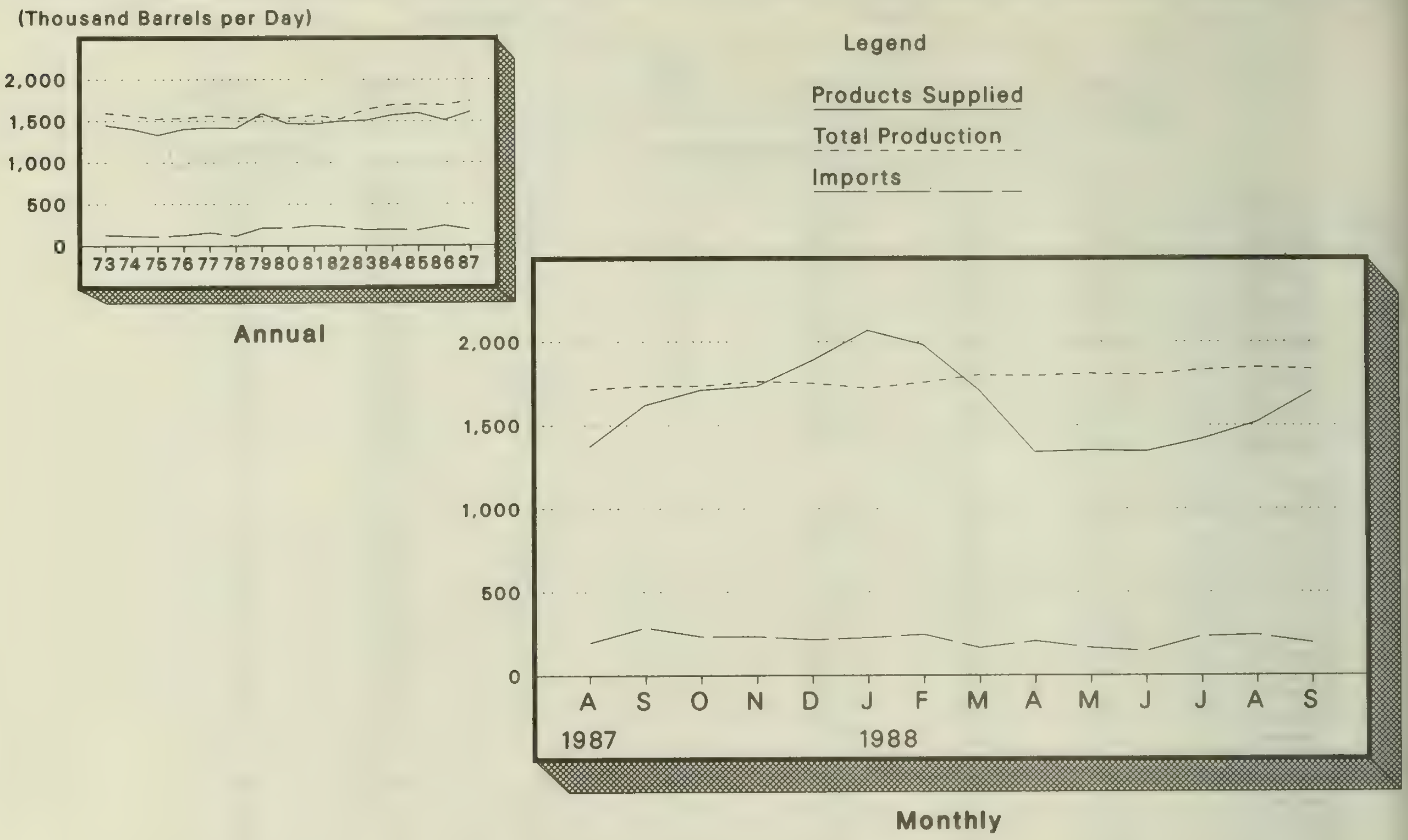
* See Explanatory Note 9.4.

** Italics denote estimates based upon preliminary data. See Explanatory Note 8.

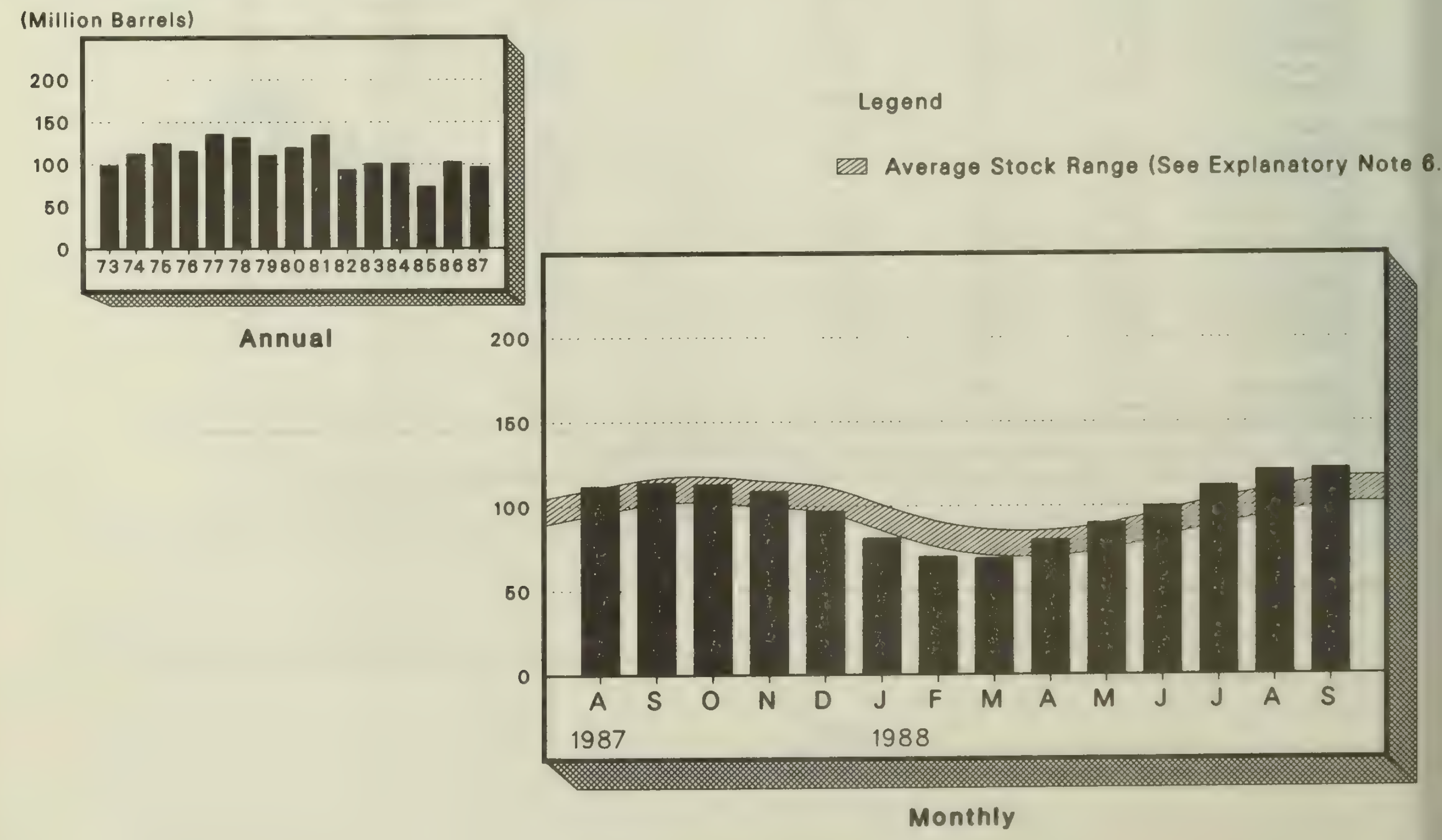
Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: See the last page of this section.

## Figure S11. Liquefied Petroleum Gases Supply and Disposition



## Figure S12. Liquefied Petroleum Gases Ending Stocks



# Table S7. Liquefied Petroleum Gases[1] Supply and Disposition

| | Supply | | | Disposition | | | |
|---|---|---|---|---|---|---|---|
| | Total Production | Imports | Stock Withdrawal [2] | Refinery Inputs | Exports | Product Supplied | Ending Stocks [3] |
| | Thousand Barrels per Day | | | | | | Million Barrels |
| **1973 Average** | **1,600** | **132** | -35 | 220 | 27 | **1,449** | **99** |
| **1974 Average** | **1,565** | **123** | -38 | 220 | 25 | **1,406** | [4] **113** |
| **1975 Average** | **1,527** | **112** | [4] -35 | 246 | 26 | **1,333** | **125** |
| **1976 Average** | **1,535** | **130** | 24 | 260 | 25 | **1,404** | **116** |
| **1977 Average** | **1,566** | **161** | -55 | 233 | 18 | **1,422** | **136** |
| **1978 Average** | **1,537** | **123** | 12 | 239 | 20 | **1,413** | **132** |
| **1979 Average** | **1,556** | **217** | 70 | 236 | 15 | **1,592** | **111** |
| **1980 Average** | **1,535** | **216** | -27 | 233 | 21 | **1,469** | [4] **120** |
| **1981 Average** | **1,571** | **244** | [4] -18 | 289 | 42 | **1,466** | **135** |
| **1982 Average** | **1,528** | **226** | 111 | 300 | 65 | **1,499** | [4] **94** |
| **1983 Average** | **1,642** | **190** | [4] 4 | 253 | 73 | **1,509** | [4] **101** |
| **1984 Average** | **1,697** | **195** | [4] 19 | 291 | 48 | **1,572** | **101** |
| **1985 Average** | **1,704** | **187** | 75 | 304 | 62 | **1,599** | **74** |
| **1986** January | 1,850 | 280 | 80 | 364 | 47 | 1,800 | 71 |
| February | 1,815 | 208 | 108 | 325 | 74 | 1,733 | 68 |
| March | 1,693 | 202 | -98 | 250 | 47 | 1,500 | 71 |
| April | 1,642 | 134 | -200 | 256 | 33 | 1,286 | 77 |
| May | 1,685 | 196 | -336 | 267 | 40 | 1,238 | 87 |
| June | 1,649 | 253 | -490 | 228 | 25 | 1,158 | 102 |
| July | 1,684 | 303 | -450 | 199 | 50 | 1,287 | 116 |
| August | 1,619 | 271 | -332 | 243 | 53 | 1,262 | 126 |
| September | 1,631 | 282 | -142 | 288 | 27 | 1,456 | 131 |
| October | 1,625 | 234 | 249 | 332 | 26 | 1,750 | 123 |
| November | 1,724 | 310 | 254 | 417 | 53 | 1,817 | 115 |
| December | 1,725 | 227 | 411 | 456 | 33 | 1,875 | 103 |
| **Average** | **1,695** | **242** | -80 | 302 | 42 | **1,512** | – |
| **1987** January | 1,751 | 183 | 500 | 419 | 43 | 1,971 | 87 |
| February | 1,762 | 201 | 205 | 341 | 38 | 1,789 | 81 |
| March | 1,761 | 132 | -10 | 282 | 52 | 1,550 | 82 |
| April | 1,775 | 149 | -121 | 274 | 36 | 1,493 | 85 |
| May | 1,732 | 142 | -283 | 269 | 34 | 1,288 | 94 |
| June | 1,732 | 119 | -175 | 255 | 22 | 1,400 | 99 |
| July | 1,764 | 190 | -145 | 244 | 30 | 1,534 | 104 |
| August | 1,717 | 198 | -259 | 252 | 33 | 1,372 | 112 |
| September | 1,736 | 288 | -81 | 266 | 56 | 1,622 | 114 |
| October | 1,736 | 233 | 59 | 294 | 23 | 1,711 | 113 |
| November | 1,763 | 233 | 129 | 356 | 35 | 1,735 | 109 |
| December | 1,753 | 214 | 372 | 395 | 56 | 1,887 | 97 |
| **Average** | **1,748** | **190** | 15 | 304 | 38 | **1,612** | – |
| **1988** January | 1,723 | 226 | 529 | 366 | 44 | 2,069 | 81 |
| February | 1,757 | 245 | 364 | 336 | 47 | 1,982 | 70 |
| March | 1,802 | 165 | 45 | 266 | 36 | 1,710 | 69 |
| April | 1,796 | 205 | -362 | 256 | 43 | 1,339 | 80 |
| May | 1,809 | 165 | -333 | 253 | 37 | 1,350 | 90 |
| June | 1,804 | 144 | -333 | 234 | 38 | 1,343 | 100 |
| July | 1,831 | 233 | -384 | 228 | 35 | 1,416 | 112 |
| August | 1,848 | 241 | -281 | 241 | 50 | 1,517 | 121 |
| September* | 1,837 | 194 | -34 | 251 | 43 | 1,704 | 122 |
| **9-Mo. Average** | **1,801** | **202** | -89 | 270 | 41 | **1,602** | – |
| **1987 9-Mo. Average** | **1,748** | **178** | -43 | 289 | 38 | **1,556** | – |
| **1986 9-Mo. Average** | **1,696** | **237** | -209 | 269 | 44 | **1,411** | – |

[1] Includes ethane, propane, normal butane, and isobutane. Beginning in January 1984, unfractionated stream is reported by individual product.

[2] A negative number indicates an increase in stocks and a positive number indicates a decrease.

[3] Stocks are totals as of end of period.

[4] In January 1975, 1981, 1983, and 1984, a new stock basis was established affecting stocks reported and stock withdrawal calculations.

See Explanatory Note 10.

* See Explanatory Note 9.5.

Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: See the last page of this section.

# Table S8. Other Petroleum Products[1] Supply and Disposition

| | | Supply | | | Disposition | | | |
|---|---|---|---|---|---|---|---|---|
| | | Total Production | Imports | Stock Withdrawal [2] | Refinery Inputs | Exports | Product Supplied | Ending Stocks [3] |
| | | Thousand Barrels per Day | | | | | | Million Barrels |
| 1973 | **Average** | **3,693** | **502** | **-9** | **750** | **166** | **3,270** | **208** |
| 1974 | **Average** | **3,558** | **432** | **-28** | **665** | **174** | **3,123** | **[4]218** |
| 1975 | **Average** | **3,418** | **277** | **[4]4** | **537** | **160** | **3,002** | **219** |
| 1976 | **Average** | **3,643** | **206** | **-5** | **524** | **175** | **3,145** | **220** |
| 1977 | **Average** | **3,912** | **205** | **-27** | **514** | **165** | **3,410** | **230** |
| 1978 | **Average** | **4,046** | **166** | **14** | **492** | **167** | **3,568** | **225** |
| 1979 | **Average** | **4,153** | **195** | **-37** | **352** | **209** | **3,749** | **238** |
| 1980 | **Average** | **3,956** | **210** | **-23** | **311** | **198** | **3,634** | **[4]247** |
| 1981 | **Average** | **3,739** | **226** | **[4]46** | **723** | **199** | **3,088** | **282** |
| 1982 | **Average** | **3,453** | **334** | **80** | **787** | **211** | **2,869** | **[4]253** |
| 1983 | **Average** | **3,460** | **411** | **[4]6** | **712** | **242** | **2,923** | **[4]256** |
| 1984 | **Average** | **3,632** | **565** | **[4]23** | **791** | **245** | **3,183** | **240** |
| 1985 | **Average** | **3,721** | **588** | **-17** | **886** | **240** | **3,166** | **246** |
| 1986 | January | 3,902 | 541 | [5]-172 | 967 | 311 | 2,993 | 252 |
| | February | 3,868 | 393 | -209 | 747 | 270 | 3,035 | [5]258 |
| | March | 3,754 | 454 | [5]21 | 854 | 208 | 3,167 | 257 |
| | April | 3,788 | 638 | -100 | 760 | 369 | 3,196 | 260 |
| | May | 4,055 | 659 | -114 | 810 | 298 | 3,492 | [5]264 |
| | June | 4,209 | 687 | [5]-70 | 853 | 263 | 3,710 | 266 |
| | July | 4,145 | 589 | [5]119 | 1,064 | 357 | 3,432 | 262 |
| | August | 4,223 | 572 | 335 | 1,061 | 301 | 3,768 | [5]252 |
| | September | 4,225 | 571 | [5]35 | 846 | 278 | 3,708 | [5]251 |
| | October | 3,969 | 575 | [5]-112 | 666 | 375 | 3,391 | 254 |
| | November | 3,904 | 559 | [5]36 | 940 | 342 | 3,217 | 253 |
| | December | 3,920 | 490 | [5]90 | 1,069 | 325 | 3,105 | 250 |
| | **Average** | **3,997** | **561** | **-10** | **888** | **308** | **3,353** | **--** |
| 1987 | January | 3,852 | 469 | -121 | 659 | 219 | 3,323 | 254 |
| | February | 3,796 | 687 | -389 | 352 | 320 | 3,422 | 265 |
| | March | 3,766 | 663 | -128 | 757 | 281 | 3,262 | 269 |
| | April | 3,933 | 589 | 107 | 872 | 254 | 3,502 | 266 |
| | May | 4,049 | 529 | 178 | 913 | 320 | 3,523 | 260 |
| | June | 4,203 | 712 | 158 | 896 | 320 | 3,857 | 255 |
| | July | 4,363 | 550 | 91 | 835 | 256 | 3,913 | 253 |
| | August | 4,340 | 616 | -148 | 693 | 238 | 3,876 | 257 |
| | September | 4,350 | 611 | -24 | 903 | 353 | 3,681 | 258 |
| | October | 4,223 | 686 | 14 | 971 | 272 | 3,680 | 258 |
| | November | 4,010 | 583 | -20 | 975 | 305 | 3,294 | 258 |
| | December | 4,050 | 633 | 261 | 1,091 | 330 | 3,523 | 250 |
| | **Average** | **4,080** | **610** | **1** | **829** | **289** | **3,572** | **--** |
| 1988 | January | 3,988 | 639 | -143 | 785 | 354 | 3,345 | 254 |
| | February | 3,941 | 570 | -35 | 726 | 318 | 3,433 | 255 |
| | March | 4,175 | 603 | -269 | 656 | 328 | 3,525 | 264 |
| | April | 4,052 | 697 | -97 | 832 | 288 | 3,533 | 267 |
| | May | 4,097 | 752 | -341 | 471 | 274 | 3,763 | 277 |
| | June | 4,278 | 703 | 76 | 759 | 379 | 3,920 | 275 |
| | July | 4,333 | 652 | -20 | 824 | 329 | 3,812 | 276 |
| | August | 4,440 | 644 | 201 | 782 | 302 | 4,200 | 269 |
| | September* | 4,259 | 582 | 129 | 841 | 323 | 3,807 | 266 |
| | **9-Mo. Average** | **4,175** | **650** | **-57** | **741** | **322** | **3,706** | **--** |
| 1987 | **9-Mo. Average** | **4,075** | **601** | **-28** | **768** | **284** | **3,596** | **--** |
| 1986 | **9-Mo. Average** | **4,020** | **568** | **-15** | **887** | **295** | **3,391** | **--** |

[1] Includes pentanes plus, other hydrocarbons and alcohol, unfinished oils, gasoline blending components and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil, and liquefied petroleum gases.

[2] A negative number indicates an increase in stocks and a positive number indicates a decrease.

[3] Stocks are totals as of end of period.

[4] In January 1975, 1981, 1983, and 1984, a new stock basis was established affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10.

[5] Ending stocks and stock withdrawal for 1986 are slightly different from those published in the 1986 *Petroleum Supply Annual* (PSA)-- Volume 1. PSA statistics inadvertently omitted stocks of other hydrocarbons and alcohol.

* See Explanatory Note 9.6.

Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: See the last page of this section.

# Sources of Summary Statistics

1. 1973 through 1976: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys, Petroleum Statement, Annual* and *PAD Districts Supply/Demand, Annual.*

2. 1977 through 1980: U.S. Department of Energy, Energy Information Administration (EIA), *Energy Data Reports, Petroleum Statement, Annual* and *PAD Districts Supply/Demand, Annual*, and unleaded gasoline data from *Monthly Petroleum Statistics Report.*

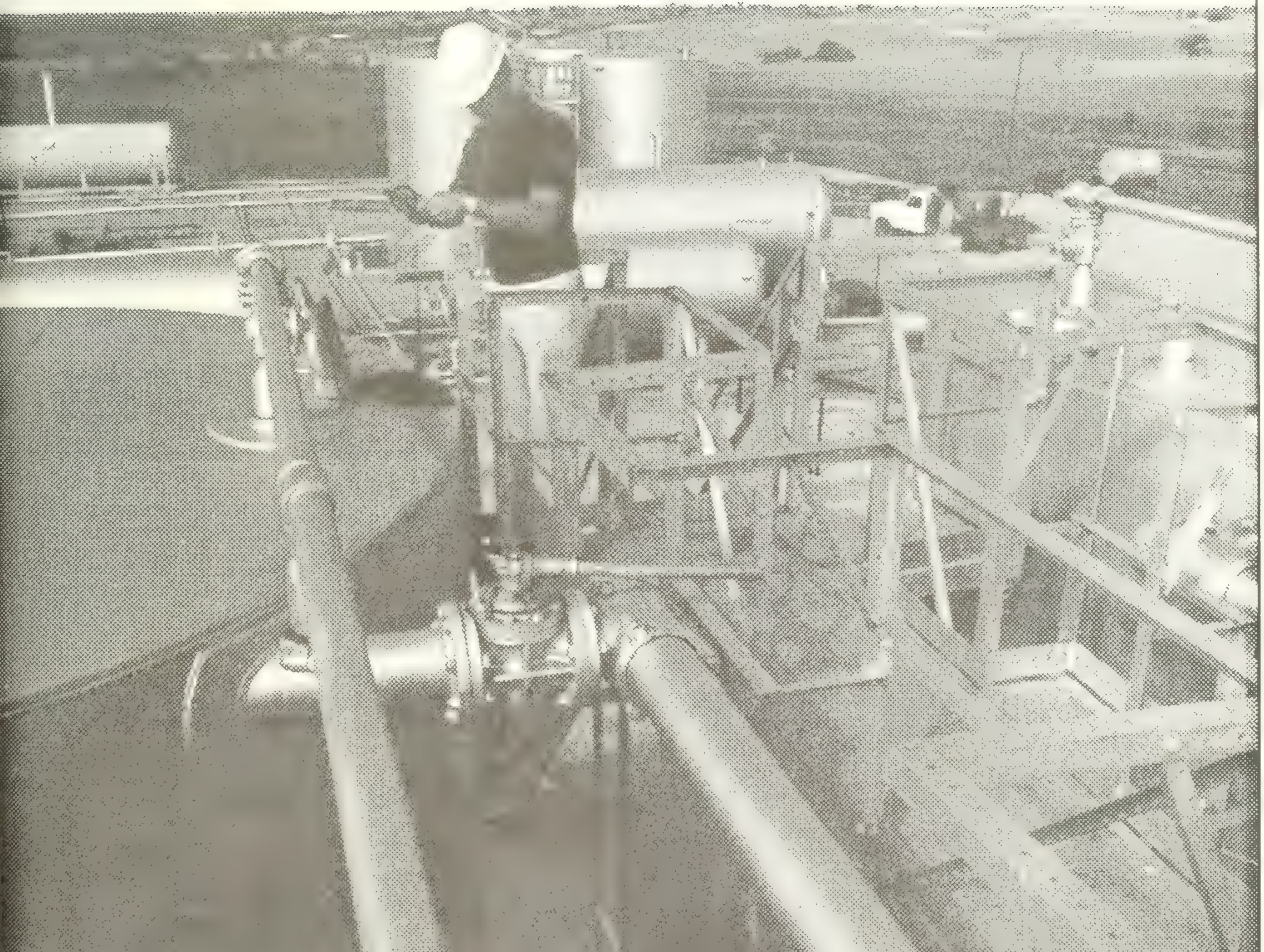
3. 1981 through 1987: EIA, *Petroleum Supply Annual.*

4. January 1988 through September 1988: Detailed Statistics in appropriate issues of the *Petroleum Supply Monthly.* (See Explanatory Notes 9.1 through 9.6.)

5. October 1988: Estimates based on EIA weekly data (except domestic crude oil production). (See Explanatory Note 1.1.)

6. January 1988 through October 1988: Domestic crude oil production estimate based on historical statistics from State conservation agencies and the U.S. Geological Survey. (See Explanatory Note 3.)

# Detailed Statistics



## Table 1. U.S. Petroleum Balance, September 1988

| | Current Month | | Year to Date | |
|---|---|---|---|---|
| | Thousand Barrels | Thousand Barrels per Day | Thousand Barrels | Thousand Barrels per Day |
| Crude Oil (Including Lease Condensate) | | | | |
| Field Production | | | | |
| (1) Alaska | E 60,585 | E 2,020 | E 553,169 | E 2,019 |
| (2) Lower 48 States | E 176,409 | E 5,880 | E 1,687,906 | E 6,160 |
| (3) Total U.S. | E 236,994 | E 7 900 | E 2,241,075 | E 8,179 |
| Net Imports | | | | |
| (4) Imports (Gross Excluding SPR) | 152,979 | 5,099 | 1,348,390 | 4,921 |
| (5) SPR Imports | 2,506 | 84 | 13,907 | 51 |
| (6) Exports | 3,655 | 122 | 44,143 | 161 |
| (7) Imports (Net Including SPR) | 151,830 | 5,061 | 1,318,154 | 4,811 |
| Other Sources | | | | |
| (8) SPR Withdrawal (+) or Addition (-) | -2,514 | -84 | -14,011 | -51 |
| (9) Other Stock Withdrawal (+) or Addition (-) | 4,722 | 157 | 20,841 | 76 |
| (10) Product Supplied and Losses | -1,126 | -38 | -10,471 | -38 |
| (11) Unaccounted for [1] | 9,377 | 313 | 89,657 | 327 |
| (12) Total Other Sources | 10,459 | 349 | 86,016 | 314 |
| (13) Crude Input to Refineries | 399,283 | 13,309 | 3,645,245 | 13,304 |
| (13) = (3) + (7) + (12) | | | | |
| Natural Gas Plant Liquids (NGPL) | | | | |
| (14) Field Production | 48,664 | 1,622 | 441,001 | 1,609 |
| (15) Net Imports [2] | 101 | 3 | 2,349 | 9 |
| (16) Stock Withdrawal (+) or Addition (-) [2] | -204 | -7 | -3,043 | -11 |
| (17) Total NGPL Supply | 48,561 | 1,619 | 440,307 | 1,607 |
| Other Liquids | | | | |
| Unfinished Oils and Gasoline Blending Components, Total | | | | |
| (18) Stock Withdrawal (+) or Addition (-) | -556 | -19 | -17,120 | -62 |
| (19) Imports | 11,070 | 369 | 113,110 | 413 |
| (20) Other Hydrocarbons and Alcohol New Supply (Field Production) | 1,889 | 63 | 16,211 | 59 |
| (21) Refinery Processing Gain [1] | 17,916 | 597 | 180,925 | 660 |
| (22) Crude Oil Product Supplied | 1,121 | 37 | 10,426 | 38 |
| (23) Total Other Liquids | 31,440 | 1,048 | 303,552 | 1,108 |
| (23) = (18) through (22) | | | | |
| (24) Total Production of Products [3] | 479,284 | 15,976 | 4,389,104 | 16,019 |
| (24) = (13) + (17) + (23) | | | | |
| Net Imports of Refined Products [3] | | | | |
| (25) Imports (Gross) | 49,889 | 1,663 | 444,567 | 1,623 |
| (26) Exports | 16,548 | 552 | 179,322 | 654 |
| (27) Imports (Net) | 33,341 | 1,111 | 265,245 | 968 |
| (28) Total New Supply of Products | 512,624 | 17,087 | 4,654,349 | 16,987 |
| (28) = (24) + (27) | | | | |
| (29) Refined Products Stock Withdrawal (+) or Addition (-) [3] | -8,131 | -271 | -6,236 | -23 |
| (30) Total Petroleum Products Supplied for Domestic Use | 504,493 | 16,816 | 4,648,113 | 16,964 |
| (30) = (28) + (29) | | | | |
| (31) Finished Motor Gasoline | 220,479 | 7.349 | 2,002,393 | 7,308 |
| (32) Distillate Fuel Oil | 84,179 | 2,806 | 831,738 | 3,036 |
| (33) Residual Fuel Oil | 33,370 | 1,112 | 349,185 | 1,274 |
| (34) Liquefied Petroleum Gases | 51,129 | 1,704 | 439,019 | 1,602 |
| (35) Other [4] | 114,215 | 3,807 | 1,015,352 | 3,706 |
| (36) Crude Oil | 1,121 | 37 | 10,426 | 38 |
| (37) Total Product Supplied | 504,493 | 16,816 | 4,648,113 | 16,964 |
| (37) = (31) through (36) | | | | |
| Ending Stocks, All Oils | | | | |
| (38) Crude Oil and Lease Condensate (Excluding SPR) | 328,448 | -- | 328,448 | -- |
| (39) Strategic Petroleum Reserve (SPR) | 554,659 | -- | 554,659 | -- |
| (40) Unfinished Oils | 109,168 | -- | 109,168 | -- |
| (41) Gasoline Blending Components [5] | 39,221 | -- | 39,221 | -- |
| (42) Pentanes Plus | 10,074 | -- | 10,074 | -- |
| (43) Finished Refined Products [3] | 585,850 | -- | 585,850 | -- |
| (44) Total Stocks | 1,627,420 | -- | 1,627,420 | -- |

---

[1] A balancing item.
[2] Includes products in the pentanes plus category only.
[3] For products included see Explanatory Note 9.7.
[4] Includes pentanes plus, other liquids, and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil and liquefied petroleum gases.
[5] Includes other hydrocarbons and alcohol.
E = Estimated.
Note: Total may not equal sum of components due to independent rounding.
Sources and estimation procedures: See Explanatory Notes 1, 2 and 9.7.

## Table 2. Supply and Disposition of Crude Oil and Petroleum Products, September 1988
(Thousand Barrels)

| Commodity | Supply | | | | | Disposition | | | | Ending Stocks |
|---|---|---|---|---|---|---|---|---|---|---|
| | Field Production | Refinery Production | Imports | Stock Withdrawal (+) or Addition (-) | Unaccounted For Crude Oil[1] | Crude Losses | Refinery Inputs | Exports | Products Supplied | |
| **Crude Oil (including lease condensate)** | E **236,994** | **0** | **155,485** | **2,208** | **9,377** | **5** | **399,283** | **3,655** | **1,121** | **883,107** |
| **Natural Gas Liquids and LRGs** | **48,556** | **15,791** | **5,992** | **-1,213** | **0** | **0** | **12,012** | **1,338** | **55,776** | **131,694** |
| Pentanes Plus | 9,224 | 0 | 158 | -204 | 0 | 0 | 4,474 | 57 | 4,647 | 10,074 |
| Liquefied Petroleum Gases | 39,332 | 15,791 | 5,834 | -1,009 | 0 | 0 | 7,538 | 1,281 | 51,129 | 121,620 |
| Ethane | 15,439 | 488 | 30 | -527 | 0 | 0 | 68 | 115 | 15,247 | 18,769 |
| Propane | 14,614 | 11,077 | 3,220 | 654 | 0 | 0 | 266 | 760 | 28,539 | 62,140 |
| Normal Butane | 4,859 | 3,744 | 1,671 | -633 | 0 | 0 | 3,253 | 349 | 6,040 | 29,270 |
| Isobutane | 4,420 | 482 | 913 | -503 | 0 | 0 | 3,951 | 57 | 1,304 | 11,441 |
| **Other Liquids** | **1,889** | **0** | **11,070** | **-556** | **0** | **0** | **20,746** | **0** | **-8,343** | **148,389** |
| Other Hydrocarbons and Alcohol | 1,889 | 0 | 0 | 13 | 0 | 0 | 1,902 | 0 | 0 | 381 |
| Unfinished Oils | 0 | 0 | 9,596 | 1,910 | 0 | 0 | 17,825 | 0 | -6,319 | 109,168 |
| Motor Gasoline Blending Components | 0 | 0 | 1,474 | -2,401 | 0 | 0 | 1,097 | 0 | -2,024 | 38,649 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | -78 | 0 | 0 | -78 | 0 | 0 | 191 |
| **Finished Petroleum Products** | **108** | **434,166** | **44,055** | **-7,122** | **0** | **0** | **0** | **15,267** | **455,940** | **464,230** |
| Finished Motor Gasoline | 10 | 208,442 | 12,089 | 409 | 0 | 0 | 0 | 471 | 220,479 | 181,945 |
| Finished Leaded Motor Gasoline | 9 | 36,218 | 127 | 2,449 | 0 | 0 | 0 | 301 | 38,502 | 42,061 |
| Finished Unleaded Motor Gasoline | 1 | 172,224 | 11,962 | -2,040 | 0 | 0 | 0 | 169 | 181,978 | 139,884 |
| Finished Aviation Gasoline | 0 | 827 | 17 | 2 | 0 | 0 | 0 | 0 | 846 | 1,904 |
| Naphtha-Type Jet Fuel | 0 | 5,944 | 79 | 369 | 0 | 0 | 0 | 214 | 6,178 | 6,492 |
| Kerosene-Type Jet Fuel | 0 | 35,326 | 1,760 | -346 | 0 | 0 | 0 | 265 | 36,475 | 40,317 |
| Kerosene | 0 | 2,347 | 391 | -337 | 0 | 0 | 0 | 41 | 2,360 | 7,468 |
| Distillate Fuel Oil | 33 | 83,345 | 8,748 | -5,791 | 0 | 0 | 0 | 2,156 | 84,179 | 130,976 |
| Residual Fuel Oil | 0 | 25,782 | 16,976 | -6,380 | 0 | 0 | 0 | 3,008 | 33,370 | 44,220 |
| Naphtha < 400 Deg. for Petro. Feed. Use | 0 | 3,023 | 2,151 | -167 | 0 | 0 | 0 | 182 | 4,825 | 2,276 |
| Other Oils > 400 Deg. for Petro. Feed. Use | 0 | 6,122 | 310 | 837 | 0 | 0 | 0 | 474 | 6,795 | 1,646 |
| Special Naphthas | 0 | 1,833 | 74 | 304 | 0 | 0 | 0 | 294 | 1,917 | 3,327 |
| Lubricants | 0 | 4,315 | 331 | 1,123 | 0 | 0 | 0 | 842 | 4,927 | 12,515 |
| Waxes | 0 | 471 | 35 | 39 | 0 | 0 | 0 | 70 | 475 | 829 |
| Petroleum Coke | 0 | 15,896 | 9 | 422 | 0 | 0 | 0 | 7,135 | 9,192 | 7,137 |
| Asphalt and Road Oil | 0 | 17,849 | 1,016 | 2,252 | 0 | 0 | 0 | 41 | 21,076 | 19,641 |
| Still Gas | 0 | 20,431 | 0 | 0 | 0 | 0 | 0 | 0 | 20,431 | 0 |
| Miscellaneous Products | 65 | 2,213 | 69 | 142 | 0 | 0 | 0 | 76 | 2,413 | 3,537 |
| **Total** | **287,547** | **449,957** | **216,602** | **-6,683** | **9,377** | **5** | **432,041** | **20,260** | **504,493** | **1,627,420** |

[1] Unaccounted for crude oil is a balancing item.

(s) = Less than 500 barrels.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 3. Year-to-Date Supply and Disposition of Crude Oil and Petroleum Products, January - September 1988

(Thousand Barrels)

| Commodity | Supply | | | | | Disposition | | | | Ending Stocks |
|---|---|---|---|---|---|---|---|---|---|---|
| | Field Production | Refinery Production | Imports | Stock Withdrawal (+) or Addition (-) | Unaccounted For Crude Oil[1] | Crude Losses | Refinery Inputs | Exports | Products Supplied | |
| **Crude Oil (including lease condensate)** | E **2,241,075** | **0** | **1,362,297** | **6,830** | **89,657** | **45** | **3,645,245** | **44,143** | **10,426** | **883,107** |
| **Natural Gas Liquids and LRGs** | **439,958** | **136,678** | **58,218** | **-27,511** | **0** | **0** | **117,477** | **11,894** | **477,972** | **131,694** |
| Pentanes Plus | 83,182 | 0 | 2,904 | -3,043 | 0 | 0 | 43,535 | 555 | 38,953 | 10,074 |
| Liquefied Petroleum Gases | 356,776 | 136,678 | 55,314 | -24,468 | 0 | 0 | 73,942 | 11,339 | 439,019 | 121,620 |
| Ethane | 133,458 | 2,866 | 357 | 3,490 | 0 | 0 | 556 | 1,121 | 138,495 | 18,769 |
| Propane | 137,877 | 96,176 | 28,864 | -14,291 | 0 | 0 | 2,239 | 6,638 | 239,749 | 62,140 |
| Normal Butane | 45,686 | 33,715 | 16,506 | -12,722 | 0 | 0 | 32,860 | 3,026 | 47,299 | 29,270 |
| Isobutane | 39,755 | 3,921 | 9,587 | -945 | 0 | 0 | 38,287 | 555 | 13,476 | 11,441 |
| **Other Liquids** | **16,211** | **0** | **113,110** | **-17,120** | **0** | **0** | **159,519** | **0** | **-47,318** | **148,389** |
| Other Hydrocarbons and Alcohol | 16,211 | 0 | 0 | 51 | 0 | 0 | 16,262 | 0 | 0 | 381 |
| Unfinished Oils | 0 | 0 | 97,273 | -15,983 | 0 | 0 | 118,867 | 0 | -37,577 | 109,168 |
| Motor Gasoline Blending Components | 0 | 0 | 15,837 | -1,253 | 0 | 0 | 24,126 | 0 | -9,542 | 38,649 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | 65 | 0 | 0 | 264 | 0 | -199 | 191 |
| **Finished Petroleum Products** | **1,043** | **3,966,488** | **389,253** | **18,232** | **0** | **0** | **0** | **167,983** | **4,207,033** | **464,230** |
| Finished Motor Gasoline | 88 | 1,893,836 | 107,340 | 6,949 | 0 | 0 | 0 | 5,820 | 2,002,393 | 181,945 |
| Finished Leaded Motor Gasoline | 79 | 366,649 | 3,469 | 11,134 | 0 | 0 | 0 | 1,949 | 379,382 | 42,061 |
| Finished Unleaded Motor Gasoline | 9 | 1,527,187 | 103,871 | -4,185 | 0 | 0 | 0 | 3,871 | 1,623,011 | 139,884 |
| Finished Aviation Gasoline | 0 | 7,023 | 134 | 427 | 0 | 0 | 0 | 0 | 7,584 | 1,904 |
| Naphtha-Type Jet Fuel | 0 | 55,573 | 804 | 1,464 | 0 | 0 | 0 | 335 | 57,506 | 6,492 |
| Kerosene-Type Jet Fuel | 0 | 317,503 | 22,276 | 1,654 | 0 | 0 | 0 | 6,909 | 334,524 | 40,317 |
| Kerosene | 0 | 20,209 | 3,209 | 979 | 0 | 0 | 0 | 253 | 24,144 | 7,468 |
| Distillate Fuel Oil | 390 | 776,526 | 71,201 | 3,506 | 0 | 0 | 0 | 19,885 | 831,738 | 130,976 |
| Residual Fuel Oil | 0 | 252,102 | 148,705 | 3,117 | 0 | 0 | 0 | 54,739 | 349,185 | 44,220 |
| Naphtha < 400 Deg. for Petro Feed Use | 0 | 33,033 | 18,374 | 60 | 0 | 0 | 0 | 1,368 | 50,099 | 2,276 |
| Other Oils > 400 Deg. for Petro Feed Use | 0 | 61,572 | 1,297 | -45 | 0 | 0 | 0 | 4,664 | 58,160 | 1,646 |
| Special Naphthas | 0 | 16,046 | 3,380 | 326 | 0 | 0 | 0 | 1,755 | 17,997 | 3,327 |
| Lubricants | 0 | 47,321 | 2,749 | 802 | 0 | 0 | 0 | 6,957 | 43,915 | 12,515 |
| Waxes | 0 | 4,672 | 429 | -46 | 0 | 0 | 0 | 473 | 4,582 | 829 |
| Petroleum Coke | 0 | 148,403 | 328 | -377 | 0 | 0 | 0 | 64,070 | 84,284 | 7,137 |
| Asphalt and Road Oil | 0 | 126,778 | 8,568 | -842 | 0 | 0 | 0 | 247 | 134,257 | 19,641 |
| Still Gas | 0 | 186,403 | 0 | 0 | 0 | 0 | 0 | 0 | 186,403 | 0 |
| Miscellaneous Products | 565 | 19,488 | 459 | 258 | 0 | 0 | 0 | 508 | 20,262 | 3,537 |
| **Total** | **2,698,287** | **4,103,166** | **1,922,878** | **-19,569** | **89,657** | **45** | **3,922,241** | **224,020** | **4,648,113** | **1,627,420** |

[1] Unaccounted for crude oil is a balancing item.

(s) = Less than 500 barrels.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

### Table 4. Daily Average Supply and Disposition of Crude Oil and Petroleum Products, September 1988
(Thousand Barrels per Day)

| Commodity | Supply | | | | | Disposition | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Field Production | Refinery Production | Imports | Stock Withdrawal (+) or Addition (-) | Unaccounted For Crude Oil[1] | Crude Losses | Refinery Inputs | Exports | Products Supplied |
| **Crude Oil (including lease condensate)** | E 7,900 | 0 | 5,183 | 74 | 313 | (s) | 13,309 | 122 | 37 |
| **Natural Gas Liquids and LRGs** | **1,619** | **526** | **200** | **-40** | **0** | **0** | **400** | **45** | **1,859** |
| Pentanes Plus | 307 | 0 | 5 | -7 | 0 | 0 | 149 | 2 | 155 |
| Liquefied Petroleum Gases | 1,311 | 526 | 194 | -34 | 0 | 0 | 251 | 43 | 1,704 |
| Ethane | 515 | 16 | 1 | -18 | 0 | 0 | 2 | 4 | 508 |
| Propane | 487 | 369 | 107 | 22 | 0 | 0 | 9 | 25 | 951 |
| Normal Butane | 162 | 125 | 56 | -21 | 0 | 0 | 108 | 12 | 201 |
| Isobutane | 147 | 16 | 30 | -17 | 0 | 0 | 132 | 2 | 43 |
| **Other Liquids** | **63** | **0** | **369** | **-19** | **0** | **0** | **692** | **0** | **-278** |
| Other Hydrocarbons and Alcohol | 63 | 0 | 0 | (s) | 0 | 0 | 63 | 0 | 0 |
| Unfinished Oils | 0 | 0 | 320 | 64 | 0 | 0 | 594 | 0 | -211 |
| Motor Gasoline Blending Components | 0 | 0 | 49 | -80 | 0 | 0 | 37 | 0 | -67 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | -3 | 0 | 0 | -3 | 0 | 0 |
| **Finished Petroleum Products** | **4** | **14,472** | **1,469** | **-237** | **0** | **0** | **0** | **509** | **15,198** |
| Finished Motor Gasoline | (s) | 6,948 | 403 | 14 | 0 | 0 | 0 | 16 | 7,349 |
| Finished Leaded Motor Gasoline | (s) | 1,207 | 4 | 82 | 0 | 0 | 0 | 10 | 1,283 |
| Finished Unleaded Motor Gasoline | (s) | 5,741 | 399 | -68 | 0 | 0 | 0 | 6 | 6,066 |
| Finished Aviation Gasoline | 0 | 28 | 1 | (s) | 0 | 0 | 0 | 0 | 28 |
| Naphtha-Type Jet Fuel | 0 | 198 | 3 | 12 | 0 | 0 | 0 | 7 | 206 |
| Kerosene-Type Jet Fuel | 0 | 1,178 | 59 | -12 | 0 | 0 | 0 | 9 | 1,216 |
| Kerosene | 0 | 78 | 13 | -11 | 0 | 0 | 0 | 1 | 79 |
| Distillate Fuel Oil | 1 | 2,778 | 292 | -193 | 0 | 0 | 0 | 72 | 2,806 |
| Residual Fuel Oil | 0 | 859 | 566 | -213 | 0 | 0 | 0 | 100 | 1,112 |
| Naphtha < 400 Deg. for Petro. Feed. Use | 0 | 101 | 72 | -6 | 0 | 0 | 0 | 6 | 161 |
| Other Oils > 400 Deg. for Petro. Feed. Use | 0 | 204 | 10 | 28 | 0 | 0 | 0 | 16 | 227 |
| Special Naphthas | 0 | 61 | 2 | 10 | 0 | 0 | 0 | 10 | 64 |
| Lubricants | 0 | 144 | 11 | 37 | 0 | 0 | 0 | 28 | 164 |
| Waxes | 0 | 16 | 1 | 1 | 0 | 0 | 0 | 2 | 16 |
| Petroleum Coke | 0 | 530 | (s) | 14 | 0 | 0 | 0 | 238 | 306 |
| Asphalt and Road Oil | 0 | 595 | 34 | 75 | 0 | 0 | 0 | 1 | 703 |
| Still Gas | 0 | 681 | 0 | 0 | 0 | 0 | 0 | 0 | 681 |
| Miscellaneous Products | 2 | 74 | 2 | 5 | 0 | 0 | 0 | 3 | 80 |
| **Total** | **9,585** | **14,999** | **7,220** | **-223** | **313** | **(s)** | **14,401** | **675** | **16,816** |

[1] Unaccounted for crude oil is a balancing item.

(s) = Less than 500 barrels per day.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 5. Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products, January - September

(Thousand Barrels per Day)

| Commodity | Supply | | | | | Disposition | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Field Production | Refinery Production | Imports | Stock Withdrawal (+) or Addition (-) | Unaccounted For Crude Oil[1] | Crude Losses | Refinery Inputs | Exports | Products Supplied |
| **Crude Oil (including lease condensate)** | E **8,179** | **0** | **4,972** | **25** | **327** | (s) | **13,304** | **161** | **38** |
| **Natural Gas Liquids and LRGs** | **1,606** | **499** | **212** | **-100** | **0** | **0** | **429** | **43** | **1,744** |
| Pentanes Plus | 304 | 0 | 11 | -11 | 0 | 0 | 159 | 2 | 142 |
| Liquefied Petroleum Gases | 1,302 | 499 | 202 | -89 | 0 | 0 | 270 | 41 | 1,602 |
| Ethane | 487 | 10 | 1 | 13 | 0 | 0 | 2 | 4 | 505 |
| Propane | 503 | 351 | 105 | -52 | 0 | 0 | 8 | 24 | 875 |
| Normal Butane | 167 | 123 | 60 | -46 | 0 | 0 | 120 | 11 | 173 |
| Isobutane | 145 | 14 | 35 | -3 | 0 | 0 | 140 | 2 | 49 |
| **Other Liquids** | **59** | **0** | **413** | **-62** | **0** | **0** | **582** | **0** | **-173** |
| Other Hydrocarbons and Alcohol | 59 | 0 | 0 | (s) | 0 | 0 | 59 | 0 | 0 |
| Unfinished Oils | 0 | 0 | 355 | -58 | 0 | 0 | 434 | 0 | -137 |
| Motor Gasoline Blending Components | 0 | 0 | 58 | -5 | 0 | 0 | 88 | 0 | -35 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | (s) | 0 | 0 | 1 | 0 | -1 |
| **Finished Petroleum Products** | **4** | **14,476** | **1,421** | **67** | **0** | **0** | **0** | **613** | **15,354** |
| Finished Motor Gasoline | (s) | 6,912 | 392 | 25 | 0 | 0 | 0 | 21 | 7,308 |
| Finished Leaded Motor Gasoline | (s) | 1,338 | 13 | 41 | 0 | 0 | 0 | 7 | 1,385 |
| Finished Unleaded Motor Gasoline | (s) | 5,574 | 379 | -15 | 0 | 0 | 0 | 14 | 5,923 |
| Finished Aviation Gasoline | 0 | 26 | (s) | 2 | 0 | 0 | 0 | 0 | 28 |
| Naphtha-Type Jet Fuel | 0 | 203 | 3 | 5 | 0 | 0 | 0 | 1 | 210 |
| Kerosene-Type Jet Fuel | 0 | 1,159 | 81 | 6 | 0 | 0 | 0 | 25 | 1,221 |
| Kerosene | 0 | 74 | 12 | 4 | 0 | 0 | 0 | 1 | 88 |
| Distillate Fuel Oil | 1 | 2,834 | 260 | 13 | 0 | 0 | 0 | 73 | 3,036 |
| Residual Fuel Oil | 0 | 920 | 543 | 11 | 0 | 0 | 0 | 200 | 1,274 |
| Naphtha < 400 Deg. for Petro. Feed. Use | 0 | 121 | 67 | (s) | 0 | 0 | 0 | 5 | 183 |
| Other Oils > 400 Deg. for Petro. Feed. Use | 0 | 225 | 5 | (s) | 0 | 0 | 0 | 17 | 212 |
| Special Naphthas | 0 | 59 | 12 | 1 | 0 | 0 | 0 | 6 | 66 |
| Lubricants | 0 | 173 | 10 | 3 | 0 | 0 | 0 | 25 | 160 |
| Waxes | 0 | 17 | 2 | (s) | 0 | 0 | 0 | 2 | 17 |
| Petroleum Coke | 0 | 542 | 1 | -1 | 0 | 0 | 0 | 234 | 308 |
| Asphalt and Road Oil | 0 | 463 | 31 | -3 | 0 | 0 | 0 | 1 | 490 |
| Still Gas | 0 | 680 | 0 | 0 | 0 | 0 | 0 | 0 | 680 |
| Miscellaneous Products | 2 | 71 | 2 | 1 | 0 | 0 | 0 | 2 | 74 |
| **Total** | **9,848** | **14,975** | **7,018** | **-71** | **327** | (s) | **14,315** | **818** | **16,964** |

[1] Unaccounted for crude oil is a balancing item.

(s) = Less than 500 barrels per day.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 6. PAD District I--Supply and Disposition of Crude Oil and Petroleum Products, September 1988
(Thousand Barrels)

| Commodity | Supply | | | | | | Disposition | | | | Ending Stocks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Field Production | Refinery Production | Imports by PADD of Entry | Stock Withdrawal (+) or Addition (-) | Unaccounted For Crude Oil[1] | Net Receipts | Crude Losses | Refinery Inputs | Exports | Products Supplied | |
| **Crude Oil (including lease condensate)** | E 1,098 | 0 | 36,575 | 1,091 | 214 | 1,960 | 1 | 40,937 | 0 | 0 | 15,053 |
| **Natural Gas Liquids and LRGs** | 886 | 1,698 | 916 | -196 | 0 | 2,514 | 0 | 116 | 121 | 5,581 | 5,905 |
| Liquefied Petroleum Gases | 771 | 1,698 | 798 | -198 | 0 | 2,514 | 0 | 91 | 121 | 5,371 | 5,853 |
| Pentanes Plus | 115 | 0 | 118 | 2 | 0 | 0 | 0 | 25 | 0 | 210 | 52 |
| **Other Liquids** | 0 | 0 | 5,229 | -530 | 0 | 177 | 0 | 8,281 | 0 | -3,405 | 18,221 |
| Other Hydrocarbons and Alcohol | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 6 |
| Unfinished Oils | 0 | 0 | 4,029 | -401 | 0 | 144 | 0 | 6,890 | 0 | -3,118 | 13,596 |
| Motor Gasoline Blending Components | 0 | 0 | 1,200 | -131 | 0 | 33 | 0 | 1,389 | 0 | -287 | 4,619 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Finished Petroleum Products** | 0 | 49,687 | 38,570 | -7,291 | 0 | 65,949 | 0 | 0 | 485 | 146,430 | 156,086 |
| Finished Motor Gasoline | 0 | 22,542 | 10,746 | 440 | 0 | 38,611 | 0 | 0 | 12 | 72,327 | 56,029 |
| Finished Leaded Motor Gasoline | 0 | 2,113 | 113 | 953 | 0 | 4,955 | 0 | 0 | 1 | 8,133 | 10,561 |
| Finished Unleaded Motor Gasoline | 0 | 20,429 | 10,633 | -513 | 0 | 33,656 | 0 | 0 | 10 | 64,195 | 45,468 |
| Finished Aviation Gasoline | 0 | -2 | 0 | 60 | 0 | 95 | 0 | 0 | 0 | 153 | 287 |
| Naphtha-Type Jet Fuel | 0 | 886 | 0 | 230 | 0 | 506 | 0 | 0 | 1 | 1,621 | 1,138 |
| Kerosene-Type Jet Fuel | 0 | 2,308 | 1,443 | -280 | 0 | 9,591 | 0 | 0 | (s) | 13,061 | 9,794 |
| Kerosene | 0 | 124 | 164 | -15 | 0 | 227 | 0 | 0 | 9 | 491 | 2,933 |
| Distillate Fuel Oil | 0 | 10,757 | 8,381 | -4,728 | 0 | 14,627 | 0 | 0 | 15 | 29,022 | 56,809 |
| Residual Fuel Oil | 0 | 4,149 | 16,158 | -4,352 | 0 | 596 | 0 | 0 | 7 | 16,544 | 19,281 |
| Petrochemical Feedstocks[2] | 0 | 190 | 374 | 54 | 0 | 11 | 0 | 0 | 39 | 590 | 420 |
| Special Naphthas | 0 | -40 | 2 | 263 | 0 | 109 | 0 | 0 | 106 | 228 | 912 |
| Lubricants | 0 | 715 | 266 | 290 | 0 | 1,141 | 0 | 0 | 201 | 2,211 | 2,625 |
| Waxes | 0 | 85 | 16 | 12 | 0 | 2 | 0 | 0 | 7 | 108 | 62 |
| Petroleum Coke | 0 | 1,332 | 0 | -12 | 0 | 0 | 0 | 0 | 56 | 1,264 | 653 |
| Asphalt and Road Oil | 0 | 4,146 | 963 | 641 | 0 | 349 | 0 | 0 | 2 | 6,097 | 4,465 |
| Still Gas | 0 | 1,928 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,928 | 0 |
| Miscellaneous Products | 0 | 567 | 57 | 106 | 0 | 84 | 0 | 0 | 33 | 781 | 678 |
| **Total** | 1,984 | 51,385 | 81,290 | -6,926 | 214 | 70,600 | 1 | 49,334 | 606 | 148,605 | 195,265 |

[1] Unaccounted for crude oil is a balancing item.

[2] Includes naphtha less than 400 degrees F endpoint and other oils equal to or greater than 400 degrees F endpoint.

(s) = Less than 500 barrels.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 7. PAD District II--Supply and Disposition of Crude Oil and Petroleum Products, September 1988

(Thousand Barrels)

| Commodity | Supply | | | | | | Disposition | | | | Ending Stocks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Field Production | Refinery Production | Imports by PADD of Entry | Stock Withdrawal (+) or Addition (-) | Unaccounted For Crude Oil[1] | Net Receipts | Crude Losses | Refinery Inputs | Exports | Products Supplied | |
| **Crude Oil (including lease condensate)** | E **24,366** | **0** | **14,289** | **4,229** | **1,560** | **45,083** | **0** | **89,006** | **521** | **0** | **64,394** |
| **Natural Gas Liquids and LRGs** | **9,276** | **2,475** | **2,736** | **-869** | **0** | **2,096** | **0** | **3,263** | **467** | **11,984** | **40,115** |
| Liquefied Petroleum Gases | 7,864 | 2,475 | 2,698 | -923 | 0 | 1,492 | 0 | 2,059 | 410 | 11,137 | 36,747 |
| Pentanes Plus | 1,412 | 0 | 38 | 54 | 0 | 604 | 0 | 1,204 | 57 | 847 | 3,368 |
| **Other Liquids** | **542** | **0** | **0** | **158** | **0** | **339** | **0** | **3,155** | **0** | **-2,116** | **23,665** |
| Other Hydrocarbons and Alcohol | 542 | 0 | 0 | -3 | 0 | 0 | 0 | 539 | 0 | 0 | 192 |
| Unfinished Oils | 0 | 0 | 0 | 474 | 0 | 267 | 0 | 1,667 | 0 | -926 | 14,980 |
| Motor Gasoline Blending Components | 0 | 0 | 0 | -269 | 0 | 72 | 0 | 993 | 0 | -1,190 | 8,419 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | -44 | 0 | 0 | 0 | -44 | 0 | 0 | 74 |
| **Finished Petroleum Products** | **3** | **96,858** | **507** | **960** | **0** | **23,698** | **0** | **0** | **587** | **121,439** | **111,565** |
| Finished Motor Gasoline | 0 | 50,820 | 71 | -362 | 0 | 15,503 | 0 | 0 | 8 | 66,024 | 52,827 |
| Finished Leaded Motor Gasoline | 0 | 8,145 | 0 | 1,040 | 0 | 2,552 | 0 | 0 | (s) | 11,737 | 13,417 |
| Finished Unleaded Motor Gasoline | 0 | 42,675 | 71 | -1,402 | 0 | 12,951 | 0 | 0 | 7 | 54,288 | 39,410 |
| Finished Aviation Gasoline | 0 | 125 | 0 | 9 | 0 | 75 | 0 | 0 | 0 | 209 | 504 |
| Naphtha-Type Jet Fuel | 0 | 647 | 76 | -91 | 0 | -5 | 0 | 0 | 0 | 627 | 919 |
| Kerosene-Type Jet Fuel | 0 | 5,602 | 84 | -841 | 0 | 2,768 | 0 | 0 | 0 | 7,613 | 8,480 |
| Kerosene | 0 | 701 | 0 | -444 | 0 | -158 | 0 | 0 | 2 | 97 | 2,175 |
| Distillate Fuel Oil | 0 | 19,995 | 155 | 565 | 0 | 5,290 | 0 | 0 | 113 | 25,892 | 30,387 |
| Residual Fuel Oil | 0 | 1,832 | 26 | 134 | 0 | -333 | 0 | 0 | 0 | 1,659 | 3,401 |
| Petrochemical Feedstocks[2] | 0 | 1,538 | 9 | 0 | 0 | 192 | 0 | 0 | 103 | 1,636 | 406 |
| Special Naphthas | 0 | 508 | 33 | 168 | 0 | 108 | 0 | 0 | 112 | 705 | 687 |
| Lubricants | 0 | 642 | 16 | 252 | 0 | 216 | 0 | 0 | 26 | 1,100 | 1,951 |
| Waxes | 0 | 64 | 12 | -23 | 0 | 0 | 0 | 0 | 3 | 50 | 133 |
| Petroleum Coke | 0 | 3,248 | 0 | 579 | 0 | 0 | 0 | 0 | 180 | 3,647 | 1,499 |
| Asphalt and Road Oil | 0 | 6,427 | 20 | 902 | 0 | 50 | 0 | 0 | 37 | 7,362 | 7,906 |
| Still Gas | 0 | 4,312 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,312 | 0 |
| Miscellaneous Products | 3 | 397 | 5 | 112 | 0 | -8 | 0 | 0 | 3 | 506 | 290 |
| **Total** | 34,187 | 99,333 | 17,531 | 4,478 | 1,560 | 71,216 | 0 | 95,424 | 1,575 | 131,306 | 239,739 |

[1] Unaccounted for crude oil is a balancing item.

[2] Includes naphtha less than 400 degrees F endpoint and other oils equal to or greater than 400 degrees F endpoint

(s) = Less than 500 barrels.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 8. PAD District III--Supply and Disposition of Crude Oil and Petroleum Products, September 1988

(Thousand Barrels)

| Commodity | Supply | | | | | | Disposition | | | | Ending Stocks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Field Production | Refinery Production | Imports by PADD of Entry | Stock Withdrawal (+) or Addition (-) | Unaccounted For Crude Oil[1] | Net Receipts | Crude Losses | Refinery Inputs | Exports | Products Supplied | |
| **Crude Oil (including lease condensate)** | E 102,882 | 0 | 97,225 | 2,057 | -1,228 | -26,199 | 3 | 174,734 | 0 | 0 | 711,613 |
| **Natural Gas Liquids and LRGs** | **32,035** | **9,036** | **1,794** | **790** | **0** | **-2,509** | **0** | **7,337** | **535** | **33,274** | **80,236** |
| Liquefied Petroleum Gases | 26,384 | 9,036 | 1,792 | 1,071 | 0 | -2,058 | 0 | 4,353 | 535 | 31,337 | 73,824 |
| Pentanes Plus | 5,651 | 0 | 2 | -281 | 0 | -451 | 0 | 2,984 | 0 | 1,937 | 6,412 |
| **Other Liquids** | **982** | **0** | **5,828** | **1,543** | **0** | **-656** | **0** | **8,778** | **0** | **-1,081** | **65,657** |
| Other Hydrocarbons and Alcohol | 982 | 0 | 0 | 42 | 0 | 0 | 0 | 1,024 | 0 | 0 | 120 |
| Unfinished Oils | 0 | 0 | 5,567 | 2,607 | 0 | -551 | 0 | 8,984 | 0 | -1,361 | 49,327 |
| Motor Gasoline Blending Components | 0 | 0 | 261 | -1,088 | 0 | -105 | 0 | -1,212 | 0 | 280 | 16,136 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | -18 | 0 | 0 | 0 | -18 | 0 | 0 | 74 |
| **Finished Petroleum Products** | **101** | **189,198** | **2,903** | **3,940** | **0** | **-92,630** | **0** | **0** | **7,347** | **96,165** | **124,620** |
| Finished Motor Gasoline | 10 | 92,356 | 341 | 3,170 | 0 | -55,920 | 0 | 0 | 424 | 39,533 | 44,945 |
| Finished Leaded Motor Gasoline | 9 | 14,484 | 0 | 1,159 | 0 | -7,874 | 0 | 0 | 283 | 7,495 | 9,283 |
| Finished Unleaded Motor Gasoline | 1 | 77,872 | 341 | 2,011 | 0 | -48,046 | 0 | 0 | 142 | 32,037 | 35,662 |
| Finished Aviation Gasoline | 0 | 459 | 12 | -43 | 0 | -184 | 0 | 0 | 0 | 244 | 601 |
| Naphtha-Type Jet Fuel | 0 | 2,533 | 0 | 326 | 0 | -630 | 0 | 0 | 213 | 2,016 | 2,241 |
| Kerosene-Type Jet Fuel | 0 | 16,816 | 2 | 719 | 0 | -13,037 | 0 | 0 | 153 | 4,347 | 14,082 |
| Kerosene | 0 | 1,396 | 227 | 99 | 0 | -69 | 0 | 0 | 30 | 1,623 | 2,114 |
| Distillate Fuel Oil | 33 | 35,497 | 0 | -452 | 0 | -20,249 | 0 | 0 | 1,510 | 13,319 | 28,733 |
| Residual Fuel Oil | 0 | 8,671 | 531 | -1,143 | 0 | -263 | 0 | 0 | 584 | 7,212 | 11,968 |
| Petrochemical Feedstocks[2] | 0 | 6,753 | 1,696 | 672 | 0 | -203 | 0 | 0 | 331 | 8,587 | 2,691 |
| Special Naphthas | 0 | 1,280 | 27 | -145 | 0 | -217 | 0 | 0 | 75 | 870 | 1,579 |
| Lubricants | 0 | 2,563 | 36 | 442 | 0 | -1,381 | 0 | 0 | 460 | 1,200 | 6,209 |
| Waxes | 0 | 247 | 0 | 16 | 0 | -2 | 0 | 0 | 52 | 209 | 455 |
| Petroleum Coke | 0 | 7,003 | 0 | -174 | 0 | 0 | 0 | 0 | 3,482 | 3,347 | 3,172 |
| Asphalt and Road Oil | 0 | 3,557 | 24 | 380 | 0 | -399 | 0 | 0 | (s) | 3,562 | 3,717 |
| Still Gas | 0 | 9,084 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9,084 | 0 |
| Miscellaneous Products | 58 | 983 | 7 | 73 | 0 | -76 | 0 | 0 | 33 | 1,012 | 2,113 |
| **Total** | **136,000** | **198,234** | **107,750** | **8,330** | **-1,228** | **-121,994** | **3** | **190,849** | **7,882** | **128,358** | **982,126** |

[1] Unaccounted for crude oil is a balancing item.

[2] Includes naphtha less than 400 degrees F endpoint and other oils equal to or greater than 400 degrees F endpoint.

(s) = Less than 500 barrels.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 9. PAD District IV--Supply and Disposition of Crude Oil and Petroleum Products, September 1988
(Thousand Barrels)

| Commodity | Supply | | | | | | Disposition | | | | Ending Stocks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Field Production | Refinery Production | Imports by PADD of Entry | Stock Withdrawal (+) or Addition (-) | Unaccounted For Crude Oil[1] | Net Receipts | Crude Losses | Refinery Inputs | Exports | Products Supplied | |
| **Crude Oil (including lease condensate)** | E **15,996** | **0** | **2,048** | **140** | **2,335** | **-6,415** | **0** | **14,104** | **0** | **0** | **11,741** |
| **Natural Gas Liquids and LRGs** | **3,709** | **346** | **290** | **-120** | **0** | **-2,101** | **0** | **538** | **21** | **1,564** | **1,297** |
| Liquefied Petroleum Gases | 3,022 | 346 | 290 | -121 | 0 | -1,948 | 0 | 453 | 21 | 1,114 | 1,161 |
| Pentanes Plus | 687 | 0 | 0 | 1 | 0 | -153 | 0 | 85 | 0 | 450 | 136 |
| **Other Liquids** | **36** | **0** | **0** | **-203** | **0** | **0** | **0** | **-212** | **0** | **45** | **3,752** |
| Other Hydrocarbons and Alcohol | 36 | 0 | 0 | -20 | 0 | 0 | 0 | 16 | 0 | 0 | 48 |
| Unfinished Oils | 0 | 0 | 0 | -22 | 0 | 0 | 0 | -222 | 0 | 200 | 1,930 |
| Motor Gasoline Blending Components | 0 | 0 | 0 | -161 | 0 | 0 | 0 | -6 | 0 | -155 | 1,774 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Finished Petroleum Products** | **4** | **14,339** | **85** | **186** | **0** | **-73** | **0** | **0** | **4** | **14,537** | **11,178** |
| Finished Motor Gasoline | 0 | 6,978 | 35 | -136 | 0 | -89 | 0 | 0 | 0 | 6,788 | 4,370 |
| Finished Leaded Motor Gasoline | 0 | 2,560 | 0 | -34 | 0 | -252 | 0 | 0 | 0 | 2,274 | 1,938 |
| Finished Unleaded Motor Gasoline | 0 | 4,418 | 35 | -102 | 0 | 163 | 0 | 0 | 0 | 4,514 | 2,432 |
| Finished Aviation Gasoline | 0 | 26 | 0 | -2 | 0 | 14 | 0 | 0 | 0 | 38 | 47 |
| Naphtha-Type Jet Fuel | 0 | 487 | 0 | -18 | 0 | -158 | 0 | 0 | (s) | 311 | 387 |
| Kerosene-Type Jet Fuel | 0 | 683 | 0 | -8 | 0 | 464 | 0 | 0 | 0 | 1,139 | 820 |
| Kerosene | 0 | 5 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 8 | 31 |
| Distillate Fuel Oil | 0 | 3,705 | 48 | 247 | 0 | -304 | 0 | 0 | 0 | 3,696 | 2,742 |
| Residual Fuel Oil | 0 | 326 | 1 | -23 | 0 | 0 | 0 | 0 | 0 | 304 | 547 |
| Petrochemical Feedstocks[2] | 0 | 45 | 0 | -5 | 0 | 0 | 0 | 0 | (s) | 40 | 17 |
| Special Naphthas | 0 | 0 | 0 | -4 | 0 | 0 | 0 | 0 | (s) | -4 | 12 |
| Lubricants | 0 | 21 | 0 | 3 | 0 | 0 | 0 | 0 | 2 | 22 | 97 |
| Waxes | 0 | 11 | 1 | 30 | 0 | 0 | 0 | 0 | (s) | 42 | 62 |
| Petroleum Coke | 0 | 261 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 274 | 9 |
| Asphalt and Road Oil | 0 | 1,129 | 0 | 94 | 0 | 0 | 0 | 0 | 1 | 1,222 | 1,973 |
| Still Gas | 0 | 602 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 602 | 0 |
| Miscellaneous Products | 4 | 60 | 0 | -8 | 0 | 0 | 0 | 0 | (s) | 56 | 64 |
| **Total** | **19,745** | **14,685** | **2,423** | **3** | **2,335** | **-8,589** | **0** | **14,430** | **25** | **16,146** | **27,968** |

[1] Unaccounted for crude oil is a balancing item.

[2] Includes naphtha less than 400 degrees F endpoint and other oils equal to or greater than 400 degrees F endpoint

(s) Less than 500 barrels.

E = Estimated

Note. Total may not equal sum of components due to independent rounding.

Sources and estimation procedures See Explanatory Notes 1 and 2

## Table 10. PAD District V--Supply and Disposition of Crude Oil and Petroleum Products, September 1988

(Thousand Barrels)

| Commodity | Supply | | | | | | Disposition | | | | Ending Stocks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Field Production | Refinery Production | Imports by PADD of Entry | Stock Withdrawal (+) or Addition (-) | Unaccounted For Crude Oil[1] | Net Receipts | Crude Losses | Refinery Inputs | Exports | Products Supplied | |
| **Crude Oil (including lease condensate)** | E **92,652** | **0** | **5,348** | **-5,309** | **6,496** | **-14,429** | **1** | **80,502** | **3,134** | **1,121** | **80,306** |
| **Natural Gas Liquids and LRGs** | **2,650** | **2,236** | **257** | **-818** | **0** | **0** | **0** | **758** | **194** | **3,373** | **4,141** |
| Liquefied Petroleum Gases | 1,291 | 2,236 | 257 | -838 | 0 | 0 | 0 | 582 | 194 | 2,170 | 4,035 |
| Pentanes Plus | 1,359 | 0 | 0 | 20 | 0 | 0 | 0 | 176 | 0 | 1,203 | 106 |
| **Other Liquids** | **329** | **0** | **13** | **-1,524** | **0** | **140** | **0** | **744** | **0** | **-1,786** | **37,094** |
| Other Hydrocarbons and Alcohol | 329 | 0 | 0 | -8 | 0 | 0 | 0 | 321 | 0 | 0 | 15 |
| Unfinished Oils | 0 | 0 | 0 | -748 | 0 | 140 | 0 | 506 | 0 | -1,114 | 29,335 |
| Motor Gasoline Blending Components | 0 | 0 | 13 | -752 | 0 | 0 | 0 | -67 | 0 | -672 | 7,701 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | -16 | 0 | 0 | 0 | -16 | 0 | 0 | 43 |
| **Finished Petroleum Products** | **0** | **84,084** | **1,991** | **-4,917** | **0** | **3,056** | **0** | **0** | **6,844** | **77,369** | **60,781** |
| Finished Motor Gasoline | 0 | 35,746 | 896 | -2,703 | 0 | 1,895 | 0 | 0 | 27 | 35,807 | 23,774 |
| Finished Leaded Motor Gasoline | 0 | 8,916 | 14 | -669 | 0 | 619 | 0 | 0 | 17 | 8,863 | 6,862 |
| Finished Unleaded Motor Gasoline | 0 | 26,830 | 882 | -2,034 | 0 | 1,276 | 0 | 0 | 10 | 26,944 | 16,912 |
| Finished Aviation Gasoline | 0 | 219 | 5 | -22 | 0 | 0 | 0 | 0 | 0 | 202 | 465 |
| Naphtha-Type Jet Fuel | 0 | 1,391 | 3 | -78 | 0 | 287 | 0 | 0 | 0 | 1,603 | 1,807 |
| Kerosene-Type Jet Fuel | 0 | 9,917 | 232 | 64 | 0 | 214 | 0 | 0 | 111 | 10,315 | 7,141 |
| Kerosene | 0 | 121 | 0 | 20 | 0 | 0 | 0 | 0 | (s) | 141 | 215 |
| Distillate Fuel Oil | 0 | 13,391 | 164 | -1,423 | 0 | 636 | 0 | 0 | 519 | 12,249 | 12,305 |
| Residual Fuel Oil | 0 | 10,804 | 260 | -996 | 0 | 0 | 0 | 0 | 2,417 | 7,651 | 9,023 |
| Petrochemical Feedstocks[2] | 0 | 619 | 382 | -51 | 0 | 0 | 0 | 0 | 183 | 767 | 388 |
| Special Naphthas | 0 | 85 | 12 | 22 | 0 | 0 | 0 | 0 | 1 | 118 | 137 |
| Lubricants | 0 | 374 | 13 | 136 | 0 | 24 | 0 | 0 | 153 | 394 | 1,633 |
| Waxes | 0 | 64 | 6 | 4 | 0 | 0 | 0 | 0 | 8 | 66 | 117 |
| Petroleum Coke | 0 | 4,052 | 9 | 16 | 0 | 0 | 0 | 0 | 3,417 | 660 | 1,804 |
| Asphalt and Road Oil | 0 | 2,590 | 9 | 235 | 0 | 0 | 0 | 0 | 1 | 2,833 | 1,580 |
| Still Gas | 0 | 4,505 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,505 | 0 |
| Miscellaneous Products | 0 | 206 | 0 | -141 | 0 | 0 | 0 | 0 | 8 | 57 | 392 |
| **Total** | **95,631** | **86,320** | **7,608** | **-12,568** | **6,496** | **-11,233** | **1** | **82,004** | **10,173** | **80,077** | **182,322** |

[1] Unaccounted for crude oil is a balancing item.

[2] Includes naphtha less than 400 degrees F endpoint and other oils equal to or greater than 400 degrees F endpoint.

(s) = Less than 500 barrels.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 11. Production of Crude Oil by PAD District and State
(Thousand Barrels)

| PAD District and State | July 1988 | | January - July | |
|---|---|---|---|---|
| | Total | Daily Average | Total | Daily Average |
| **PAD District I, Total** | E **1,147** | E **37** | E **8,270** | E **39** |
| Florida | 682 | 22 | 4,702 | 22 |
| New York | E 45 | E 1 | E 344 | E 2 |
| Pennsylvania | E 236 | E 8 | E 1,701 | E 8 |
| Virginia | E 1 | E 0 | E 12 | E 0 |
| West Virginia | 206 | 7 | 1,564 | 7 |
| Adjustment [1] | -23 | -1 | -53 | (s) |
| **PAD District II, Total** | E **24,964** | E **805** | E **179,899** | E **845** |
| Illinois | 2,000 | 65 | 13,995 | 66 |
| Indiana | 258 | 8 | 2,342 | 11 |
| Kansas | 4,764 | 154 | 34,325 | 161 |
| Kentucky | 444 | 14 | 3,177 | 15 |
| Michigan | E 1,959 | E 63 | E 14,033 | E 66 |
| Missouri | 10 | (s) | E 75 | E 0 |
| Nebraska | 506 | 16 | 3,383 | 16 |
| North Dakota | 3,348 | 108 | 23,236 | 109 |
| Ohio | E 850 | E 27 | E 6,314 | E 30 |
| Oklahoma | 10,551 | 340 | 76,336 | 358 |
| South Dakota | 135 | 4 | 977 | 5 |
| Tennessee | 48 | 2 | E 350 | E 2 |
| Adjustment [1] | 91 | 3 | 1,355 | 6 |
| **PAD District III, Total** | E **112,242** | E **3,621** | E **784,568** | E **3,683** |
| Alabama | 1,835 | 59 | 12,120 | 57 |
| Arkansas | E 1,122 | E 36 | E 8,045 | E 38 |
| Louisiana [2] | 13,700 | 442 | 97,537 | 458 |
| Mississippi | 2,300 | 74 | 15,890 | 75 |
| New Mexico | 5,890 | 190 | 41,268 | 194 |
| Texas [2] | 61,506 | 1,984 | 432,653 | 2,031 |
| Federal Offshore PAD District III | 24,655 | 795 | E 174,552 | E 819 |
| Adjustment [1] | 1,234 | 40 | 2,502 | 12 |
| **PAD District IV, Total** | E **17,320** | E **559** | E **119,855** | E **563** |
| Colorado | E 2,740 | E 88 | E 18,687 | E 88 |
| Montana | E 1,953 | E 63 | E 13,777 | E 65 |
| Utah | 2,765 | 89 | 19,836 | 93 |
| Wyoming | 9,547 | 308 | 67,491 | 317 |
| Adjustment [1] | 315 | 10 | 65 | (s) |
| **PAD District V, Total** | **94,147** | **3,037** | **661,523** | **3,106** |
| Alaska [2] | 60,766 | 1,960 | 430,313 | 2,020 |
| South Alaska | 1,331 | 43 | 9,173 | 43 |
| North Slope | 59,434 | 1,917 | 421,147 | 1,977 |
| Adjustment for Alaska [1] | 1 | (s) | -7 | (s) |
| Arizona | 10 | (s) | 67 | (s) |
| California [2] | 30,208 | 974 | 209,067 | 982 |
| Nevada | 277 | 9 | 1,839 | 9 |
| Federal Offshore PAD District V | 2,595 | 84 | 18,253 | 86 |
| Adjustment for Arizona, California, and Nevada [1] | 291 | 9 | 1,984 | 9 |
| **U.S. Total**[2] | E **249,820** | E **8,059** | E **1,754,115** | E **8,235** |

[1] These adjustments are used to reconcile the national and PAD District level sums of the State data with the independently estimated U.S. and Alaskan figures shown in the Summary Statistics portion of this issue and with the PAD District level figures published in a previous issue. Final data at the State, PAD District, and national levels will be published without adjustments in the *Petroleum Supply Annual.*

[2] Includes the following current month offshore production (thousand barrels): Alaska: State - 4,184; California: State - 2,382; Louisiana: State - 2,144; Texas: State - 150; U.S. Total, including Federal offshore - E36,110.

(s) = Less than 500 barrels or less than 500 barrels per day.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Source: State Conservation Agencies and the U.S. Minerals Management Service.

## Table 12. Natural Gas Processing Plant Net Production of Petroleum Products by PAD District, September 1988

(Thousand Barrels)

| Commodity | PAD District I | | | PAD District II | | | | PAD District III | | | | | | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | East Coast | Appalachian No.1 | Total | Ind., Ill., Ky. * | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast | |
| **Natural Gas Liquids** | **270** | **616** | **886** | **693** | **357** | **8,226** | **9,276** | **18,385** | **3,075** | **6,225** | **690** | **3,660** | **32,035** | **3,709** | **2,650** | **48,556** |
| Pentanes Plus | 47 | 68 | 115 | 127 | 91 | 1,194 | 1,412 | 3,476 | 357 | 1,129 | 192 | 497 | 5,651 | 687 | 1,359 | 9,224 |
| Liquefied Petroleum Gases | 223 | 548 | 771 | 566 | 266 | 7,032 | 7,864 | 14,909 | 2,718 | 5,096 | 498 | 3,163 | 26,384 | 3,022 | 1,291 | 39,332 |
| Ethane | 84 | 191 | 275 | 112 | 0 | 2,824 | 2,936 | 6,172 | 1,157 | 2,253 | 111 | 1,473 | 11,166 | 1,061 | 1 | 15,439 |
| Propane | 91 | 238 | 329 | 266 | 158 | 2,754 | 3,178 | 5,527 | 987 | 1,722 | 206 | 1,078 | 9,520 | 1,248 | 339 | 14,614 |
| Normal Butane | 42 | 86 | 128 | 110 | 102 | 944 | 1,156 | 2,334 | -1,026 | 521 | 128 | 407 | 2,364 | 503 | 708 | 4,859 |
| Isobutane | 6 | 33 | 39 | 78 | 6 | 510 | 594 | 876 | 1,600 | 600 | 53 | 205 | 3,334 | 210 | 243 | 4,420 |
| **Finished Petroleum Products** | **0** | **0** | **0** | **1** | **0** | **2** | **3** | **48** | **39** | **4** | **10** | **0** | **101** | **4** | **0** | **108** |
| Finished Motor Gasoline | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 9 | 0 | 0 | 0 | 10 | 0 | 0 | 10 |
| Finished Leaded Motor Gasoline | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 9 | 0 | 0 | 9 |
| Finished Unleaded Motor Gasoline | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| Finished Aviation Gasoline | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Naphtha-Type Jet Fuel | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Kerosene-Type Jet Fuel | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Kerosene | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Distillate Fuel Oil | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 3 | 0 | 0 | 33 | 0 | 0 | 33 |
| Special Naphthas | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Miscellaneous Products | 0 | 0 | 0 | 1 | 0 | 2 | 3 | 47 | 0 | 1 | 10 | 0 | 58 | 4 | 0 | 65 |
| **Total Production** | **270** | **616** | **886** | **694** | **357** | **8,228** | **9,279** | **18,433** | **3,114** | **6,229** | **700** | **3,660** | **32,136** | **3,713** | **2,650** | **48,664** |

* Effective January 1987 "Appalachian No.2" is combined with "Ind., Ill., Ky.".

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 13. Refinery Input of Crude Oil and Petroleum Products by PAD District, September 1988

(Thousand Barrels, Except Where Noted)

| Commodity | PAD District I | | | PAD District II | | | | PAD District III | | | | | | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | East Coast | Appalachian No.1 | Total | Ind., Ill., Ky. * | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast | |
| **Crude Oil (including lease condensate)** | **37,924** | **3,013** | **40,937** | **57,743** | **9,960** | **21,303** | **89,006** | **14,269** | **87,717** | **65,692** | **4,891** | **2,165** | **174,734** | **14,104** | **80,502** | **399,283** |
| **Natural Gas Liquids** | | | | | | | | | | | | | | | | |
| Pentanes Plus | 25 | 0 | 25 | 458 | 96 | 650 | 1,204 | 956 | 1,298 | 375 | 179 | 176 | 2,984 | 85 | 176 | 4,474 |
| Liquefied Petroleum Gases | 46 | 45 | 91 | 1,249 | 164 | 646 | 2,059 | 694 | 1,458 | 2,035 | 119 | 47 | 4,353 | 453 | 582 | 7,538 |
| Ethane | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 68 | 0 | 0 | 68 | 0 | 0 | 68 |
| Propane | 0 | 0 | 0 | 84 | 0 | 0 | 84 | 2 | 121 | 54 | 0 | 0 | 177 | 0 | 5 | 266 |
| Normal Butane | 4 | 45 | 49 | 503 | 81 | 185 | 769 | 334 | 524 | 869 | 25 | 4 | 1,756 | 355 | 324 | 3,253 |
| Isobutane | 42 | 0 | 42 | 662 | 83 | 461 | 1,206 | 358 | 813 | 1,044 | 94 | 43 | 2,352 | 98 | 253 | 3,951 |
| **Other Liquids** | | | | | | | | | | | | | | | | |
| Other Hydrocarbons and Alcohol | 2 | 0 | 2 | 520 | 2 | 17 | 539 | 0 | 577 | 423 | 0 | 24 | 1,024 | 16 | 321 | 1,902 |
| Unfinished Oil (net) | 6,580 | 310 | 6,890 | 1,708 | 38 | -79 | 1,667 | 389 | 8,221 | 357 | 15 | 2 | 8,984 | -222 | 506 | 17,825 |
| Motor Gasoline Blending Components (net) | 1,447 | -58 | 1,389 | 1,157 | -153 | -11 | 993 | -90 | -721 | -442 | 46 | -5 | -1,212 | -6 | -67 | 1,097 |
| Aviation Gasoline Blending Components (net) | 0 | 0 | 0 | -37 | 0 | -7 | -44 | 0 | 0 | -18 | 0 | 0 | -18 | 0 | -16 | -78 |
| **Total Input to Refineries** | **46,024** | **3,310** | **49,334** | **62,798** | **10,107** | **22,519** | **95,424** | **16,218** | **98,550** | **68,422** | **5,250** | **2,409** | **190,849** | **14,430** | **82,004** | **432,041** |
| **Crude Oil Distillation** | | | | | | | | | | | | | | | | |
| Gross Input (daily average) | 1,207 | 100 | 1,308 | 1,933 | 332 | 711 | 2,977 | 475 | 2,920 | 2,243 | 162 | 72 | 5,873 | 473 | 2,726 | 13,356 |
| Operable Capacity (daily average) | 1,352 | 109 | 1,462 | 2,253 | 332 | 734 | 3,320 | 587 | 3,603 | 2,947 | 255 | 76 | 7,467 | 541 | 3,176 | 15,965 |
| Operating Ratio (percent)[1] | 89.3 | 92.0 | 89.5 | 85.8 | 100.0 | 96.8 | 89.7 | 81.0 | 81.0 | 76.1 | 63.8 | 95.5 | 78.7 | 87.5 | 85.8 | 83.7 |
| **Downstream Processing** | | | | | | | | | | | | | | | | |
| **Fresh Feed Input (daily average)** | | | | | | | | | | | | | | | | |
| Catalytic Cracking | 549 | 17 | 565 | 653 | 111 | 221 | 984 | 180 | 1,219 | 680 | 31 | 26 | 2,136 | 164 | 684 | 4,533 |
| Catalytic Hydrocracking | 61 | 0 | 61 | 115 | 0 | 6 | 121 | 14 | 180 | 160 | 2 | 0 | 356 | 6 | 407 | 951 |
| Cokers | 74 | 0 | 74 | 138 | 41 | 74 | 252 | 9 | 205 | 331 | 10 | 0 | 556 | 10 | 485 | 1,376 |
| **Crude Oil Qualities** | | | | | | | | | | | | | | | | |
| Sulfur Content, Weighted Average (percent) | 1.29 | .66 | 1.24 | 1.05 | 2.06 | .59 | 1.05 | .83 | 1.01 | 1.26 | 1.47 | .95 | 1.10 | .75 | 1.05 | 1.08 |
| API Gravity, Weighted Average | 30.08 | 37.69 | 30.65 | 34.76 | 29.18 | 36.81 | 34.63 | 38.48 | 33.48 | 31.28 | 32.67 | 40.04 | 33.12 | 35.95 | 25.31 | 31.72 |
| **Operable Capacity (daily average)** | **1,352** | **109** | **1,462** | **2,253** | **332** | **734** | **3,320** | **587** | **3,603** | **2,947** | **255** | **76** | **7,467** | **541** | **3,176** | **15,965** |
| Operating | 1,339 | 109 | 1,449 | 2,187 | 332 | 734 | 3,253 | 528 | 3,412 | 2,588 | 248 | 76 | 6,851 | 541 | 3,048 | 15,141 |
| Idle | 13 | 0 | 13 | 67 | 0 | 0 | 67 | 59 | 191 | 359 | 7 | 0 | 616 | 0 | 128 | 824 |
| **Alaskan Crude Oil Receipts** | **1,169** | **0** | **1,169** | **1,101** | **0** | **276** | **1,377** | **0** | **3,474** | **2,791** | **96** | **0** | **6,361** | **0** | **43,664** | **52,571** |

[1] Represents gross input divided by operable capacity.

(s) Less than 500 barrels.

* Effective January 1987 "Appalachian No.2" is combined with "Ind., Ill., Ky.".

Sources and estimation procedures: See Explanatory Notes 1 and 2

## Table 14. Refinery Net Production of Petroleum Products by PAD District, September 1988

(Thousand Barrels)

| Commodity | PAD District I | | | PAD District II | | | | PAD District III | | | | | | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | East Coast | Appalachian No.1 | Total | Ind., Ill., Ky. * | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast | |
| Liquefied Refinery Gases | 1,670 | 28 | 1,698 | 1,831 | 208 | 436 | 2,475 | 388 | 4,602 | 3,864 | 88 | 94 | 9,036 | 346 | 2,236 | 15,791 |
| Ethane | 152 | 0 | 152 | 13 | 0 | 0 | 13 | -31 | 259 | 19 | 0 | 0 | 247 | 0 | 76 | 488 |
| Propane | 1,341 | 28 | 1,369 | 1,902 | 203 | 466 | 2,571 | 458 | 3,446 | 1,764 | 83 | 62 | 5,813 | 185 | 1,139 | 11,077 |
| Normal Butane | 145 | 0 | 145 | -53 | 2 | -30 | -81 | -270 | 856 | 2,057 | 5 | 23 | 2,671 | 152 | 857 | 3,744 |
| Isobutane | 32 | 0 | 32 | -31 | 3 | 0 | -28 | 231 | 41 | 24 | 0 | 9 | 305 | 9 | 164 | 482 |
| Finished Motor Gasoline | 21,355 | 1,187 | 22,542 | 33,871 | 4,934 | 12,015 | 50,820 | 8,905 | 48,284 | 32,110 | 1,680 | 1,377 | 92,356 | 6,978 | 35,746 | 208,442 |
| Finished Leaded Motor Gasoline | 1,901 | 212 | 2,113 | 3,603 | 1,066 | 3,476 | 8,145 | 2,318 | 6,246 | 5,246 | 234 | 440 | 14,484 | 2,560 | 8,916 | 36,218 |
| Finished Unleaded Motor Gasoline | 19,454 | 975 | 20,429 | 30,268 | 3,868 | 8,539 | 42,675 | 6,587 | 42,038 | 26,864 | 1,446 | 937 | 77,872 | 4,418 | 26,830 | 172,224 |
| Finished Aviation Gasoline | -2 | 0 | -2 | 81 | 31 | 13 | 125 | 123 | 216 | 120 | 0 | 0 | 459 | 26 | 219 | 827 |
| Naphtha-Type Jet Fuel | 886 | 0 | 886 | 343 | 38 | 266 | 647 | 650 | 976 | 524 | 156 | 227 | 2,533 | 487 | 1,391 | 5,944 |
| Kerosene-Type Jet Fuel | 2,308 | 0 | 2,308 | 3,743 | 533 | 1,326 | 5,602 | 1,050 | 7,827 | 7,833 | 56 | 50 | 16,816 | 683 | 9,917 | 35,326 |
| Kerosene | 82 | 42 | 124 | 428 | 256 | 17 | 701 | 0 | 932 | 436 | 28 | 0 | 1,396 | 5 | 121 | 2,347 |
| Distillate Fuel Oil | 9,683 | 1,074 | 10,757 | 12,454 | 2,070 | 5,471 | 19,995 | 3,194 | 17,232 | 13,208 | 1,371 | 492 | 35,497 | 3,705 | 13,391 | 83,345 |
| Residual Fuel Oil | 4,102 | 47 | 4,149 | 1,422 | 248 | 162 | 1,832 | 431 | 4,918 | 3,062 | 247 | 13 | 8,671 | 326 | 10,804 | 25,782 |
| Naphtha < 400 Deg. for Petro. Feed. Use | 178 | 0 | 178 | 766 | 0 | 103 | 869 | 156 | 1,353 | 165 | 38 | 2 | 1,714 | 37 | 225 | 3,023 |
| Other Oils > 400 Deg. for Petro. Feed. Use | 12 | 0 | 12 | 623 | 0 | 46 | 669 | 135 | 3,758 | 1,146 | 0 | 0 | 5,039 | 8 | 394 | 6,122 |
| Special Naphthas | -63 | 23 | -40 | 326 | 0 | 182 | 508 | 118 | 995 | 17 | 150 | 0 | 1,280 | 0 | 85 | 1,833 |
| Lubricants | 344 | 371 | 715 | 347 | 0 | 295 | 642 | 40 | 1,466 | 666 | 391 | 0 | 2,563 | 21 | 374 | 4,315 |
| Waxes | 0 | 85 | 85 | 31 | 0 | 33 | 64 | 11 | 115 | 65 | 56 | 0 | 247 | 11 | 64 | 471 |
| Petroleum Coke | 1,306 | 26 | 1,332 | 2,044 | 448 | 756 | 3,248 | 333 | 3,279 | 3,247 | 126 | 18 | 7,003 | 261 | 4,052 | 15,896 |
| Marketable | 336 | 0 | 336 | 1,129 | 302 | 497 | 1,928 | 42 | 1,612 | 2,493 | 79 | 0 | 4,226 | 70 | 3,040 | 9,600 |
| Catalyst | 970 | 26 | 996 | 915 | 146 | 259 | 1,320 | 291 | 1,667 | 754 | 47 | 18 | 2,777 | 191 | 1,012 | 6,296 |
| Asphalt and Road Oil | 3,874 | 272 | 4,146 | 3,948 | 1,388 | 1,091 | 6,427 | 434 | 608 | 1,631 | 782 | 102 | 3,557 | 1,129 | 2,590 | 17,849 |
| Still Gas | 1,783 | 145 | 1,928 | 2,887 | 331 | 1,094 | 4,312 | 747 | 4,837 | 3,246 | 161 | 93 | 9,084 | 602 | 4,505 | 20,431 |
| Miscellaneous Products | 520 | 47 | 567 | 311 | 33 | 53 | 397 | 15 | 579 | 389 | 0 | 0 | 983 | 60 | 206 | 2,213 |
| Fuel Use | 20 | 0 | 20 | 0 | 0 | 0 | 0 | 1 | 0 | 42 | 0 | 0 | 43 | 0 | 5 | 68 |
| Non-Fuel Use | 500 | 47 | 547 | 311 | 33 | 53 | 397 | 14 | 579 | 347 | 0 | 0 | 940 | 60 | 201 | 2,145 |
| **Total Production** | **48,038** | **3,347** | **51,385** | **65,456** | **10,518** | **23,359** | **99,333** | **16,730** | **101,977** | **71,729** | **5,330** | **2,468** | **198,234** | **14,685** | **86,320** | **449,957** |
| Processing Gain(-) or Loss(+)[1] | -2,014 | -37 | -2,051 | -2,658 | -411 | -840 | -3,909 | -512 | -3,427 | -3,307 | -80 | -59 | -7,385 | -255 | -4,316 | -17,916 |

[1] Represents the arithmetic difference between input and output.

* Effective January 1987 "Appalachian No.2" is combined with "Ind., Ill., Ky.".

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 15. Percent Refinery Yield of Petroleum Products by PAD District, September 1988

| Commodity | PAD District I | | | PAD District II | | | | PAD District III | | | | | | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | East Coast | Appalachian No.1 | Total | Ind., Ill., Ky. * | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast | |
| Liquefied Refinery Gases | 3.8 | 0.8 | 3.6 | 3.1 | 2.1 | 2.1 | 2.7 | 2.6 | 4.8 | 5.9 | 1.8 | 4.3 | 4.9 | 2.5 | 2.8 | 3.8 |
| Finished Motor Gasoline[2] | 44.6 | 36.1 | 44.0 | 51.3 | 48.3 | 50.5 | 50.8 | 50.1 | 47.6 | 45.0 | 27.2 | 52.4 | 46.4 | 46.3 | 42.9 | 46.4 |
| Finished Aviation Gasoline[3] | .0 | .0 | .0 | .2 | .3 | .1 | .2 | .8 | .2 | .2 | .0 | .0 | .3 | .2 | .3 | .2 |
| Naphtha-Type Jet Fuel | 2.0 | 0 | 1.9 | .6 | .4 | 1.3 | .7 | 4.4 | 1.0 | .8 | 3.2 | 10.5 | 1.4 | 3.5 | 1.7 | 1.4 |
| Kerosene-Type Jet Fuel | 5.2 | .0 | 4.8 | 6.3 | 5.3 | 6.2 | 6.2 | 7.2 | 8.2 | 11.9 | 1.1 | 2.3 | 9.2 | 4.9 | 12.2 | 8.5 |
| Kerosene | .2 | 1.3 | .3 | .7 | 2.6 | .1 | .8 | .0 | 1.0 | .7 | .6 | 0 | .8 | .0 | .1 | .6 |
| Distillate Fuel Oil | 21.8 | 32.3 | 22.5 | 20.9 | 20.7 | 25.8 | 22.1 | 21.8 | 18.0 | 20.0 | 27.9 | 22.7 | 19.3 | 26.7 | 16.5 | 20.0 |
| Residual Fuel Oil | 9.2 | 1.4 | 8.7 | 2.4 | 2.5 | .8 | 2.0 | 2.9 | 5.1 | 4.6 | 5.0 | .6 | 4.7 | 2.3 | 13.3 | 6.2 |
| Naphtha < 400 Deg. for Petro. Feed. Use | .4 | 0 | .4 | 1.3 | 0 | .5 | 1.0 | 1.1 | 1.4 | .2 | .8 | .1 | .9 | .3 | .3 | .7 |
| Other Oils > 400 Deg. for Petro. Feed. Use | .0 | 0 | .0 | 1.0 | 0 | .2 | .7 | .9 | 3.9 | 1.7 | 0 | 0 | 2.7 | .1 | .5 | 1.5 |
| Special Naphthas | -.1 | .7 | -.1 | .5 | 0 | .9 | .6 | .8 | 1.0 | .0 | 3.1 | 0 | .7 | .0 | .1 | .4 |
| Lubricants | .8 | 11.2 | 1.5 | .6 | 0 | 1.4 | .7 | .3 | 1.5 | 1.0 | 8.0 | 0 | 1.4 | .2 | .5 | 1.0 |
| Waxes | 0 | 2.6 | .2 | .1 | 0 | .2 | .1 | .1 | .1 | .1 | 1.1 | 0 | .1 | .1 | .1 | .1 |
| Petroleum Coke | 2.9 | .8 | 2.8 | 3.4 | 4.5 | 3.6 | 3.6 | 2.3 | 3.4 | 4.9 | 2.6 | .8 | 3.8 | 1.9 | 5.0 | 3.8 |
| Asphalt and Road Oil | 8.7 | 8.2 | 8.7 | 6.6 | 13.9 | 5.1 | 7.1 | 3.0 | .6 | 2.5 | 15.9 | 4.7 | 1.9 | 8.1 | 3.2 | 4.3 |
| Still Gas | 4.0 | 4.4 | 4.0 | 4.9 | 3.3 | 5.2 | 4.8 | 5.1 | 5.0 | 4.9 | 3.3 | 4.3 | 4.9 | 4.3 | 5.6 | 4.9 |
| Miscellaneous Products | 1.2 | 1.4 | 1.2 | .5 | .3 | .2 | .4 | .1 | .6 | .6 | 0 | 0 | .5 | .4 | .3 | .5 |
| Processing Gain(-) or Loss(+)[4] | -4.5 | -1.1 | -4.3 | -4.5 | -4.1 | -4.0 | -4.3 | -3.5 | -3.6 | -5.0 | -1.6 | -2.7 | -4.0 | -1.8 | -5.3 | -4.3 |

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[1] Based on crude oil input and net reruns of unfinished oils.

[2] Based on total finished motor gasoline output plus net output of motor gasoline blending components, minus input of natural gas plant liquids, other hydrocarbons and alcohol

[3] Based on finished aviation gasoline output plus net output of aviation gasoline blending components.

[4] Represents the difference between Input and Production.

Note: Total may not equal sum of components due to independent rounding.

* Effective January 1987 "Appalachian No.2" is combined with "Ind., Ill., Ky.".

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 16. Imports of Crude Oil and Petroleum Products by PAD District, September 1988
(Thousand Barrels)

| Commodity | Petroleum Administration for Defense Districts | | | | | | Daily Average |
|---|---|---|---|---|---|---|---|
| | I | II | III | IV | V | Total | |
| **Crude Oil (including lease condensate)** [1] [2] | 36,575 | 25,253 | 86,261 | 2,048 | 5,348 | 155,485 | 5,183 |
| **Natural Gas Liquids** | **916** | **2,736** | **1,794** | **290** | **257** | **5,992** | **200** |
| Pentanes Plus | 118 | 38 | 2 | 0 | 0 | 158 | 5 |
| Liquefied Petroleum Gases | 798 | 2,698 | 1,792 | 290 | 257 | 5,834 | 194 |
| Ethane | 28 | 0 | 1 | 0 | 1 | 30 | 1 |
| Propane | 565 | 2,037 | 452 | 138 | 28 | 3,220 | 107 |
| Normal Butane | 133 | 429 | 862 | 99 | 148 | 1,671 | 56 |
| Isobutane | 72 | 231 | 477 | 53 | 80 | 913 | 30 |
| **Other Liquids** [1] | **5,229** | **0** | **5,828** | **0** | **13** | **11,070** | **369** |
| Unfinished Oils [1] | 4,029 | 0 | 5,567 | 0 | 0 | 9,596 | 320 |
| Naphthas and Lighter | 4 | 0 | 978 | 0 | 0 | 982 | 33 |
| Kerosene and Light Gas Oils | 0 | 0 | 126 | 0 | 0 | 126 | 4 |
| Heavy Gas Oils | 3,330 | 0 | 1,299 | 0 | 0 | 4,629 | 154 |
| Residuum | 695 | 0 | 3,164 | 0 | 0 | 3,859 | 129 |
| Motor Gasoline Blending Components | 1,200 | 0 | 261 | 0 | 13 | 1,474 | 49 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Finished Petroleum Products** | **38,570** | **507** | **2,903** | **85** | **1,991** | **44,055** | **1,469** |
| Finished Motor Gasoline | 10,746 | 71 | 341 | 35 | 896 | 12,089 | 403 |
| Finished Leaded Motor Gasoline | 113 | 0 | 0 | 0 | 14 | 127 | 4 |
| Finished Unleaded Motor Gasoline | 10,633 | 71 | 341 | 35 | 882 | 11,962 | 399 |
| Finished Aviation Gasoline | 0 | 0 | 12 | 0 | 5 | 17 | 1 |
| Naphtha-Type Jet Fuel | 0 | 76 | 0 | 0 | 3 | 79 | 3 |
| Kerosene-Type Jet Fuel | 1,443 | 84 | 2 | 0 | 232 | 1,760 | 59 |
| Bonded Aircraft Fuel | 643 | 84 | 0 | 0 | 221 | 947 | 32 |
| Other | 800 | 0 | 2 | 0 | 11 | 813 | 27 |
| Kerosene | 164 | 0 | 227 | 0 | 0 | 391 | 13 |
| Distillate Fuel Oil | 8,381 | 155 | 0 | 48 | 164 | 8,748 | 292 |
| Bonded Ships Bunkers | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 8,381 | 155 | 0 | 48 | 164 | 8,748 | 292 |
| Residual Fuel Oil | 16,158 | 26 | 531 | 1 | 260 | 16,976 | 566 |
| Bonded Ships Bunkers | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 16,158 | 26 | 531 | 1 | 260 | 16,976 | 566 |
| Naphtha < 400 Deg. for Petro. Feed. Use | 374 | 9 | 1,696 | 0 | 72 | 2,151 | 72 |
| Other Oils > 400 Deg. for Petro. Feed. Use | 0 | 0 | 0 | 0 | 310 | 310 | 10 |
| Special Naphthas | 2 | 33 | 27 | 0 | 12 | 74 | 2 |
| Lubricants | 266 | 16 | 36 | 0 | 13 | 331 | 11 |
| Waxes | 16 | 12 | 0 | 1 | 6 | 35 | 1 |
| Petroleum Coke | 0 | 0 | 0 | 0 | 9 | 9 | (s) |
| Asphalt and Road Oil | 963 | 20 | 24 | 0 | 9 | 1,016 | 34 |
| Miscellaneous Products | 57 | 5 | 7 | 0 | 0 | 69 | 2 |
| **Total Imports** | **81,290** | **28,495** | **96,786** | **2,423** | **7,608** | **216,602** | **7,220** |

[1] Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

[2] Includes crude oil imported for storage in the Strategic Petroleum Reserve.

(s) = Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 17. Year-to-Date Imports of Crude Oil and Petroleum Products by PAD District, January - September 1988
(Thousand Barrels)

| Commodity | Petroleum Administration for Defense Districts | | | | | | Total (Daily Average) |
|---|---|---|---|---|---|---|---|
| | I | II | III | IV | V | Total | |
| **Crude Oil (including lease condensate)** [1] [2] | **317,468** | **244,867** | **738,532** | **17,147** | **44,283** | **1,362,297** | **4,972** |
| **Natural Gas Liquids** | **11,567** | **23,705** | **17,197** | **3,454** | **2,295** | **58,218** | **212** |
| Pentanes plus | 2,164 | 310 | 223 | 207 | 0 | 2,904 | 11 |
| Liquefied Petroleum Gases | 9,403 | 23,395 | 16,974 | 3,247 | 2,295 | 55,314 | 202 |
| Ethane | 65 | 191 | 62 | 1 | 38 | 357 | 1 |
| Propane | 6,043 | 15,672 | 5,164 | 1,602 | 383 | 28,864 | 105 |
| Normal Butane | 2,047 | 4,733 | 7,513 | 1,033 | 1,180 | 16,506 | 60 |
| Isobutane | 1,247 | 2,800 | 4,235 | 612 | 693 | 9,587 | 35 |
| **Other Liquids** [1] | **46,489** | **1,126** | **64,320** | **0** | **1,175** | **113,110** | **413** |
| Unfinished Oils [1] | 32,394 | 1,105 | 62,919 | 0 | 855 | 97,273 | 355 |
| Naphthas and Lighter | 1,781 | 238 | 13,534 | 0 | 254 | 15,807 | 58 |
| Kerosene and Light Gas Oils | 217 | 0 | 1,710 | 0 | 0 | 1,927 | 7 |
| Heavy Gas Oils | 23,598 | 499 | 8,943 | 0 | 357 | 33,397 | 122 |
| Residuum | 6,798 | 368 | 38,732 | 0 | 244 | 46,142 | 168 |
| Motor Gasoline Blending Components | 14,095 | 21 | 1,401 | 0 | 320 | 15,837 | 58 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Finished Petroleum Products** | **332,095** | **8,899** | **32,174** | **1,094** | **14,991** | **389,253** | **1,421** |
| Finished Motor Gasoline | 96,575 | 924 | 3,009 | 459 | 6,373 | 107,340 | 392 |
| Finished Leaded Motor Gasoline | 3,157 | 27 | 39 | 27 | 219 | 3,469 | 13 |
| Finished Unleaded Motor Gasoline | 93,418 | 897 | 2,970 | 432 | 6,154 | 103,871 | 379 |
| Finished Aviation Gasoline | 0 | 0 | 25 | 0 | 109 | 134 | (s) |
| Naphtha-Type Jet Fuel | 0 | 774 | 0 | 0 | 30 | 804 | 3 |
| Kerosene-Type Jet Fuel | 14,295 | 3,732 | 991 | 0 | 3,258 | 22,276 | 81 |
| Bonded Aircraft Fuel | 8,497 | 3,732 | 609 | 0 | 2,392 | 15,230 | 56 |
| Other | 5,798 | 0 | 382 | 0 | 866 | 7,046 | 26 |
| Kerosene | 2,266 | 0 | 943 | 0 | 0 | 3,209 | 12 |
| Distillate Fuel Oil | 67,739 | 1,404 | 602 | 605 | 851 | 71,201 | 260 |
| Bonded Ships Bunkers | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 67,739 | 1,404 | 602 | 605 | 851 | 71,201 | 260 |
| Residual Fuel Oil | 138,250 | 895 | 6,817 | 2 | 2,741 | 148,705 | 543 |
| Bonded Ships Bunkers | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 138,250 | 895 | 6,817 | 2 | 2,741 | 148,705 | 543 |
| Naphtha < 400 Deg. for Petro. Feed. Use | 1,919 | 124 | 16,040 | 0 | 291 | 18,374 | 67 |
| Other Oils > 400 Deg. for Petro. Feed. Use | 228 | 0 | 545 | 0 | 524 | 1,297 | 5 |
| Special Naphthas | 397 | 476 | 2,427 | 1 | 79 | 3,380 | 12 |
| Lubricants | 2,326 | 117 | 220 | 0 | 86 | 2,749 | 10 |
| Waxes | 247 | 116 | 14 | 8 | 44 | 429 | 2 |
| Petroleum Coke | 37 | 0 | 134 | 0 | 157 | 328 | 1 |
| Asphalt and Road Oil | 7,440 | 306 | 355 | 19 | 448 | 8,568 | 31 |
| Miscellaneous Products | 376 | 31 | 52 | 0 | 0 | 459 | 2 |
| **Total Imports** | **707,619** | **278,597** | **852,223** | **21,695** | **62,744** | **1,922,878** | **7,018** |

[1] Crude oil and unfinished oils are reported by the PAD District in which they are to be processed, all other products are reported by the PAD District of entry.

[2] Includes crude oil imported for storage in the Strategic Petroleum Reserve.

(s) Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 18. Imports of Crude Oil and Petroleum Products by Source and PAD District,[1] September 1988

(Thousand Barrels)

| Source | Crude Oil [2] | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Products [3] | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | **All PAD Districts** | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Algeria | 3,501 | 424 | 695 | 0 | 0 | 0 | 0 | 690 | 1,682 | 0 | 1,217 | 4,708 | 8,209 | 274 |
| Iraq | 14,370 | 0 | 400 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 400 | 14,770 | 492 |
| Kuwait | 4,820 | 364 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 364 | 5,184 | 173 |
| Saudi Arabia | 27,106 | 398 | 2,404 | 0 | 792 | 325 | 0 | 419 | 0 | 0 | 0 | 4,337 | 31,443 | 1,048 |
| United Arab Emirates | 658 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 658 | 22 |
| Subtotal Arab OPEC | 50,455 | 1,186 | 3,499 | 0 | 792 | 325 | 0 | 1,109 | 1,682 | 0 | 1,217 | 9,809 | 60,264 | 2,009 |
| **Other OPEC** | | | | | | | | | | | | | | |
| Ecuador | 771 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 181 | 0 | 0 | 181 | 952 | 32 |
| Indonesia | 6,027 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 607 | 0 | 310 | 917 | 6,944 | 231 |
| Nigeria | 15,442 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 405 | 0 | 0 | 405 | 15,847 | 528 |
| Venezuela | 12,742 | (s) | 1,888 | 239 | 2,470 | 763 | 0 | 3,684 | 1,758 | 0 | 550 | 11,352 | 24,094 | 803 |
| Subtotal Other OPEC | 34,982 | (s) | 1,888 | 239 | 2,470 | 763 | 0 | 3,684 | 2,951 | 0 | 860 | 12,855 | 47,837 | 1,595 |
| **Other** | | | | | | | | | | | | | | |
| Angola | 7,109 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 356 | 0 | 0 | 356 | 7,465 | 249 |
| Argentina | 0 | 0 | 0 | 0 | 192 | 0 | 0 | 0 | 0 | 0 | 0 | 192 | 192 | 6 |
| Australia | 1,223 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 226 | 0 | 0 | 226 | 1,449 | 48 |
| Bahama Islands | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 760 | 0 | 0 | 760 | 760 | 25 |
| Belgium | 0 | 0 | 699 | 0 | 0 | 0 | 0 | 0 | 411 | 0 | 0 | 1,110 | 1,110 | 37 |
| Brazil | 0 | 0 | 0 | 0 | 2,783 | 0 | 0 | 0 | 0 | 27 | 0 | 2,810 | 2,810 | 94 |
| Cameroon | 417 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 332 | 0 | 0 | 332 | 749 | 25 |
| Canada | 18,568 | 3,639 | 27 | 0 | 1,429 | 309 | 15 | 2,109 | 1,116 | 47 | 356 | 9,047 | 27,615 | 920 |
| China, People's Republic of | 1,906 | 0 | 0 | 0 | 339 | 0 | 0 | 0 | 0 | 0 | 36 | 375 | 2,281 | 76 |
| China, Taiwan | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 14 | 14 | (s) |
| Colombia | 3,762 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 763 | 0 | 0 | 763 | 4,525 | 151 |
| Congo | 1,557 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 166 | 0 | 0 | 166 | 1,723 | 57 |
| Egypt | 491 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 492 | 16 |
| France | 0 | 0 | 0 | 0 | 588 | 0 | 0 | 0 | 280 | 0 | 9 | 877 | 877 | 29 |
| Germany FD (W) | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 525 | 0 | 2 | 530 | 530 | 18 |
| Greece | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 330 | 0 | 0 | 330 | 330 | 11 |
| India | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 174 | 174 | 274 | 9 |
| Ireland | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 203 | 0 | 0 | 203 | 203 | 7 |
| Italy | 0 | 0 | 585 | 0 | 604 | 0 | 0 | 0 | 299 | 0 | 37 | 1,525 | 1,525 | 51 |
| Japan | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 45 | 45 | 45 | 2 |
| Korea, Republic of | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 36 | 37 | 37 | 1 |
| Malaysia | 274 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 274 | 9 |
| Mexico | 22,359 | 1,003 | 0 | 0 | 101 | 147 | 0 | 299 | 1,313 | 0 | 40 | 2,902 | 25,261 | 842 |
| Netherlands Antilles | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 320 | 0 | 84 | 404 | 404 | 13 |
| Netherlands | 0 | 1 | 0 | 0 | 247 | 0 | 0 | 0 | 0 | 0 | 76 | 324 | 324 | 11 |
| Norway | 2,560 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 118 | 118 | 2,678 | 89 |
| Peru | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 532 | 0 | 0 | 532 | 532 | 18 |
| Portugal | 0 | 0 | 0 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 47 | 47 | 2 |
| Puerto Rico | 0 | 0 | 130 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 739 | 869 | 869 | 29 |
| Romania | 0 | 0 | 0 | 633 | 209 | 0 | 0 | 0 | 283 | 0 | 0 | 1,125 | 1,125 | 38 |
| Singapore | 0 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 13 | (s) |
| South Africa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 8 | 8 | (s) |
| Spain | 0 | 0 | 1,021 | 0 | 1,271 | 0 | 0 | 0 | 341 | 0 | 140 | 2,773 | 2,773 | 92 |

See footnotes at end of table.

## Table 18. Imports of Crude Oil and Petroleum Products by Source and PAD District,[1] September 1988 (continued)
(Thousand Barrels)

| Source | Crude Oil [2] | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Products [3] | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | **All PAD Districts (continued)** | | | | | | | |
| **Other (continued)** | | | | | | | | | | | | | | |
| Sweden | 0 | 0 | 0 | 0 | 257 | 0 | 0 | 0 | 0 | 0 | 0 | 257 | 257 | 9 |
| Syria | 532 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 532 | 18 |
| Thailand | 535 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 535 | 18 |
| Trinidad and Tobago | 2,418 | 0 | 0 | 0 | 40 | 0 | 0 | 65 | 313 | 0 | 3 | 421 | 2,839 | 95 |
| Turkey | 0 | 0 | 360 | 0 | 0 | 0 | 0 | 0 | 230 | 0 | 27 | 617 | 617 | 21 |
| United Kingdom | 3,616 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 781 | 0 | 50 | 832 | 4,448 | 148 |
| U.S.S.R. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 252 | 0 | 0 | 0 | 252 | 252 | 8 |
| Virgin Islands | 0 | 0 | 1,387 | 567 | 767 | 296 | 376 | 1,230 | 2,463 | 0 | 0 | 7,086 | 7,086 | 236 |
| Yemen (Sanaa) | 2,102 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,102 | 70 |
| Zaire | 519 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 519 | 17 |
| Subtotal Other | 70,048 | 4,648 | 4,209 | 1,235 | 8,827 | 751 | 391 | 3,955 | 12,343 | 74 | 2,019 | 38,452 | 108,500 | 3,617 |
| **Total Imports** | **155,485** | **5,834** | **9,596** | **1,474** | **12,089** | **1,839** | **391** | **8,748** | **16,976** | **74** | **4,096** | **61,117** | **216,602** | **7,220** |
| | | | | | | | **PAD District I** | | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Algeria | 0 | 0 | 695 | 0 | 0 | 0 | 0 | 690 | 1,682 | 0 | 0 | 3,067 | 3,067 | 102 |
| Iraq | 597 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 597 | 20 |
| Saudi Arabia | 7,216 | 398 | 0 | 0 | 792 | 104 | 0 | 419 | 0 | 0 | 0 | 1,713 | 8,929 | 298 |
| United Arab Emirates | 658 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 658 | 22 |
| Subtotal Arab OPEC | 8,471 | 398 | 695 | 0 | 792 | 104 | 0 | 1,109 | 1,682 | 0 | 0 | 4,780 | 13,251 | 442 |
| **Other OPEC** | | | | | | | | | | | | | | |
| Ecuador | 380 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 181 | 0 | 0 | 181 | 561 | 19 |
| Indonesia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 607 | 0 | 0 | 607 | 607 | 20 |
| Nigeria | 8,466 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 405 | 0 | 0 | 405 | 8,871 | 296 |
| Venezuela | 4,022 | (s) | 340 | 0 | 2,230 | 763 | 0 | 3,684 | 1,758 | 0 | 537 | 9,312 | 13,334 | 444 |
| Subtotal Other OPEC | 12,868 | (s) | 340 | 0 | 2,230 | 763 | 0 | 3,684 | 2,951 | 0 | 537 | 10,505 | 23,373 | 779 |
| **Other** | | | | | | | | | | | | | | |
| Angola | 3,650 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 356 | 0 | 0 | 356 | 4,006 | 134 |
| Argentina | 0 | 0 | 0 | 0 | 192 | 0 | 0 | 0 | 0 | 0 | 0 | 192 | 192 | 6 |
| Bahama Islands | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 760 | 0 | 0 | 760 | 760 | 25 |
| Belgium | 0 | 0 | 573 | 0 | 0 | 0 | 0 | 0 | 411 | 0 | 0 | 984 | 984 | 33 |
| Brazil | 0 | 0 | 0 | 0 | 2,543 | 0 | 0 | 0 | 0 | 0 | 0 | 2,543 | 2,543 | 85 |
| Cameroon | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 332 | 0 | 0 | 332 | 332 | 11 |
| Canada | 2,038 | 397 | 4 | 0 | 1,138 | 219 | 15 | 1,842 | 1,055 | 2 | 243 | 4,914 | 6,952 | 232 |
| China, People's Republic of | 744 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 744 | 25 |
| Colombia | 450 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 763 | 0 | 0 | 763 | 1,213 | 40 |
| Congo | 816 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 166 | 0 | 0 | 166 | 982 | 33 |
| Egypt | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | (s) |
| France | 0 | 0 | 0 | 0 | 456 | 0 | 0 | 0 | 280 | 0 | 9 | 745 | 745 | 25 |
| Germany FD (W) | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 525 | 0 | 2 | 529 | 529 | 18 |
| Greece | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 330 | 0 | 0 | 330 | 330 | 11 |
| Ireland | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 203 | 0 | 0 | 203 | 203 | 7 |
| Italy | 0 | 0 | 463 | 0 | 604 | 0 | 0 | 0 | 299 | 0 | 0 | 1,366 | 1,366 | 46 |

See footnotes at end of table.

## Table 18. Imports of Crude Oil and Petroleum Products by Source and PAD District,[1] September 1988 (continued)

(Thousand Barrels)

| Source | Crude Oil [2] | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Products [3] | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PAD District I (continued)** | | | | | | | | | | | | | | |
| **Other (continued)** | | | | | | | | | | | | | | |
| Japan | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | (s) |
| Korea, Republic of | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | (s) | (s) |
| Mexico | 2,608 | 0 | 0 | 0 | 0 | 61 | 0 | 199 | 782 | 0 | 0 | 1,042 | 3,650 | 122 |
| Netherlands Antilles | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 320 | 0 | 84 | 404 | 404 | 13 |
| Netherlands | 0 | 1 | 0 | 0 | 247 | 0 | 0 | 0 | 0 | 0 | 8 | 256 | 256 | 9 |
| Norway | 2,560 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 118 | 118 | 2,678 | 89 |
| Peru | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 532 | 0 | 0 | 532 | 532 | 18 |
| Puerto Rico | 0 | 0 | 130 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 642 | 772 | 772 | 26 |
| Romania | 0 | 0 | 0 | 633 | 209 | 0 | 0 | 0 | 283 | 0 | 0 | 1,125 | 1,125 | 38 |
| South Africa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 5 | (s) |
| Spain | 0 | 0 | 437 | 0 | 1,271 | 0 | 0 | 0 | 341 | 0 | 140 | 2,189 | 2,189 | 73 |
| Sweden | 0 | 0 | 0 | 0 | 257 | 0 | 0 | 0 | 0 | 0 | 0 | 257 | 257 | 9 |
| Syria | 532 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 532 | 18 |
| Trinidad and Tobago | 459 | 0 | 0 | 0 | 40 | 0 | 0 | 65 | 313 | 0 | 3 | 421 | 880 | 29 |
| Turkey | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 230 | 0 | 0 | 230 | 230 | 8 |
| United Kingdom | 1,030 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 781 | 0 | 0 | 782 | 1,812 | 60 |
| U.S.S.R. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 252 | 0 | 0 | 0 | 252 | 252 | 8 |
| Virgin Islands | 0 | 0 | 1,387 | 567 | 767 | 296 | 149 | 1,230 | 2,463 | 0 | 0 | 6,859 | 6,859 | 229 |
| Zaire | 349 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 349 | 12 |
| Subtotal Other | 15,236 | 400 | 2,994 | 1,200 | 7,724 | 576 | 164 | 3,588 | 11,525 | 2 | 1,257 | 29,430 | 44,666 | 1,489 |
| **Total Imports** | **36,575** | **798** | **4,029** | **1,200** | **10,746** | **1,443** | **164** | **8,381** | **16,158** | **2** | **1,794** | **44,715** | **81,290** | **2,710** |
| **PAD District II** | | | | | | | | | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Algeria | 550 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 550 | 18 |
| Saudi Arabia | 4,648 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,648 | 155 |
| Subtotal Arab OPEC | 5,198 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5,198 | 173 |
| **Other OPEC** | | | | | | | | | | | | | | |
| Ecuador | 391 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 391 | 13 |
| Nigeria | 2,365 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,365 | 79 |
| Subtotal Other OPEC | 2,756 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,756 | 92 |
| **Other** | | | | | | | | | | | | | | |
| Cameroon | 417 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 417 | 14 |
| Canada | 14,289 | 2,698 | 0 | 0 | 71 | 76 | 0 | 155 | 26 | 33 | 98 | 3,157 | 17,446 | 582 |
| Egypt | 491 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 491 | 16 |
| Mexico | 0 | 0 | 0 | 0 | 0 | 84 | 0 | 0 | 0 | 0 | 0 | 84 | 84 | 3 |
| South Africa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | (s) |
| Yemen (Sanaa) | 2,102 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,102 | 70 |
| Subtotal Other | 17,299 | 2,698 | 0 | 0 | 71 | 160 | 0 | 155 | 26 | 33 | 100 | 3,242 | 20,541 | 685 |
| **Total Imports** | **25,253** | **2,698** | **0** | **0** | **71** | **160** | **0** | **155** | **26** | **33** | **100** | **3,242** | **28,495** | **950** |

See footnotes at end of table.

## Table 18. Imports of Crude Oil and Petroleum Products by Source and PAD District,[1] September 1988 (continued)

(Thousand Barrels)

| Source | Crude Oil [2] | LPG | Unfin-ished Oils | Gasoline Blending Compo-nents | Finished Motor Gasoline | Jet Fuel | Kero-sene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Prod-ucts [3] | Total Prod-ucts | Total Petro-leum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | PAD District III | | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Algeria | 2,951 | 424 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,217 | 1,641 | 4,592 | 153 |
| Iraq | 13,773 | 0 | 400 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 400 | 14,173 | 472 |
| Kuwait | 4,820 | 364 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 364 | 5,184 | 173 |
| Saudi Arabia | 15,242 | 0 | 2,404 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,404 | 17,646 | 588 |
| Subtotal Arab OPEC | 36,786 | 788 | 2,804 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,217 | 4,809 | 41,595 | 1,386 |
| **Other OPEC** | | | | | | | | | | | | | | |
| Indonesia | 2,471 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,471 | 82 |
| Nigeria | 4,611 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,611 | 154 |
| Venezuela | 8,720 | 0 | 1,548 | 239 | 240 | 0 | 0 | 0 | 0 | 0 | 13 | 2,040 | 10,760 | 359 |
| Subtotal Other OPEC | 15,802 | 0 | 1,548 | 239 | 240 | 0 | 0 | 0 | 0 | 0 | 13 | 2,040 | 17,842 | 595 |
| **Other** | | | | | | | | | | | | | | |
| Angola | 3,459 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,459 | 115 |
| Australia | 854 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 854 | 28 |
| Belgium | 0 | 0 | 126 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 126 | 126 | 4 |
| Brazil | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 27 | 0 | 27 | 27 | 1 |
| Canada | 0 | 0 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 23 | 1 |
| China, People's Republic of | 741 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 36 | 36 | 777 | 26 |
| Colombia | 3,312 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,312 | 110 |
| Congo | 741 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 741 | 25 |
| Germany FD (W) | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | (s) |
| India | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 174 | 174 | 274 | 9 |
| Italy | 0 | 0 | 122 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 37 | 159 | 159 | 5 |
| Japan | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 7 | 7 | (s) |
| Mexico | 19,751 | 1,003 | 0 | 0 | 101 | 2 | 0 | 0 | 531 | 0 | 26 | 1,663 | 21,414 | 714 |
| Netherlands | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 68 | 68 | 68 | 2 |
| Portugal | 0 | 0 | 0 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 47 | 47 | 2 |
| Puerto Rico | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 97 | 97 | 97 | 3 |
| Spain | 0 | 0 | 584 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 584 | 584 | 19 |
| Trinidad and Tobago | 1,959 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,959 | 65 |
| Turkey | 0 | 0 | 360 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 27 | 387 | 387 | 13 |
| United Kingdom | 2,586 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 50 | 2,636 | 88 |
| Virgin Islands | 0 | 0 | 0 | 0 | 0 | 0 | 227 | 0 | 0 | 0 | 0 | 227 | 227 | 8 |
| Zaire | 170 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 170 | 6 |
| Subtotal Other | 33,673 | 1,004 | 1,215 | 22 | 101 | 2 | 227 | 0 | 531 | 27 | 547 | 3,676 | 37,349 | 1,245 |
| **Total Imports** | **86,261** | **1,792** | **5,567** | **261** | **341** | **2** | **227** | **0** | **531** | **27** | **1,777** | **10,525** | **96,786** | **3,226** |
| | | | | | | | PAD District IV | | | | | | | |
| **Other** | | | | | | | | | | | | | | |
| Canada | 2,048 | 290 | 0 | 0 | 35 | 0 | 0 | 48 | 1 | 0 | 1 | 375 | 2,423 | 81 |
| Subtotal Other | 2,048 | 290 | 0 | 0 | 35 | 0 | 0 | 48 | 1 | 0 | 1 | 375 | 2,423 | 81 |
| **Total Imports** | **2,048** | **290** | **0** | **0** | **35** | **0** | **0** | **48** | **1** | **0** | **1** | **375** | **2,423** | **81** |

See footnotes at end of table

## Table 18. Imports of Crude Oil and Petroleum Products by Source and PAD District,[1] September 1988 (continued)
(Thousand Barrels)

| Source | Crude Oil [2] | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Products [3] | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **PAD District V** | | | | | | | | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Saudi Arabia | 0 | 0 | 0 | 0 | 0 | 221 | 0 | 0 | 0 | 0 | 0 | 221 | 221 | 7 |
| Subtotal Arab OPEC | 0 | 0 | 0 | 0 | 0 | 221 | 0 | 0 | 0 | 0 | 0 | 221 | 221 | 7 |
| **Other OPEC** | | | | | | | | | | | | | | |
| Indonesia | 3,556 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 310 | 310 | 3,866 | 129 |
| Subtotal Other OPEC | 3,556 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 310 | 310 | 3,866 | 129 |
| **Other** | | | | | | | | | | | | | | |
| Australia | 369 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 226 | 0 | 0 | 226 | 595 | 20 |
| Brazil | 0 | 0 | 0 | 0 | 240 | 0 | 0 | 0 | 0 | 0 | 0 | 240 | 240 | 8 |
| Canada | 193 | 255 | 0 | 0 | 185 | 14 | 0 | 64 | 34 | 12 | 14 | 578 | 771 | 26 |
| China, People's Republic of | 421 | 0 | 0 | 0 | 339 | 0 | 0 | 0 | 0 | 0 | 0 | 339 | 760 | 25 |
| China, Taiwan | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 14 | 14 | (s) |
| France | 0 | 0 | 0 | 0 | 132 | 0 | 0 | 0 | 0 | 0 | 0 | 132 | 132 | 4 |
| Japan | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 36 | 36 | 36 | 1 |
| Korea, Republic of | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 36 | 37 | 37 | 1 |
| Malaysia | 274 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 274 | 9 |
| Mexico | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 14 | 114 | 114 | 4 |
| Singapore | 0 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 13 | (s) |
| South Africa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | (s) |
| Thailand | 535 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 535 | 18 |
| Subtotal Other | 1,792 | 257 | 0 | 13 | 896 | 14 | 0 | 164 | 260 | 12 | 114 | 1,730 | 3,522 | 117 |
| **Total Imports** | **5,348** | **257** | **0** | **13** | **896** | **235** | **0** | **164** | **260** | **12** | **424** | **2,260** | **7,608** | **254** |

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[1] Crude Oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

[2] Includes crude oil imported for storage in the Strategic Petroleum Reserve.

[3] Includes aviation gasoline, aviation gasoline blending components, waxes, asphalt, lubricants, pentanes plus, naphthas less than 400 degrees F endpoint, other oils equal to or greater than 400 degrees F endpoint, petroleum coke and miscellaneous products.

[4] Beginning in January 1988, imports of crude oil and petroleum products from the Neutral Zone are shown separately. Prior to January 1988, these data were included with imports from Saudi Arabia and Kuwait.

(s) = Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 19. Year-to-Date Imports of Crude Oil and Petroleum Products by Source and PAD District,[1] January - September 1988

(Thousand Barrels)

| Source | Crude Oil [2] | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Products [3] | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **All PAD Districts** | | | | | | | | | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Algeria | 32,879 | 5,699 | 7,731 | 0 | 0 | 289 | 0 | 3,265 | 15,300 | 0 | 13,015 | 45,299 | 78,178 | 285 |
| Iraq | 87,948 | 0 | 807 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 807 | 88,755 | 324 |
| Kuwait | 19,968 | 790 | 2,637 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,427 | 23,395 | 85 |
| Neutral Zone[4] | 3,274 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,274 | 12 |
| Saudi Arabia | 233,203 | 7,221 | 26,494 | 335 | 6,393 | 2,209 | 325 | 3,595 | 0 | 0 | 660 | 47,232 | 280,435 | 1,023 |
| United Arab Emirates | 7,433 | 0 | 573 | 0 | 0 | 592 | 0 | 342 | 0 | 0 | 213 | 1,720 | 9,153 | 33 |
| Subtotal Arab OPEC | 384,705 | 13,710 | 38,242 | 335 | 6,393 | 3,090 | 325 | 7,202 | 15,300 | 0 | 13,888 | 98,485 | 483,190 | 1,763 |
| **Other OPEC** | | | | | | | | | | | | | | |
| Ecuador | 7,517 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,825 | 0 | 0 | 3,825 | 11,342 | 41 |
| Gabon | 4,990 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,990 | 18 |
| Indonesia | 47,173 | 0 | 1,176 | 0 | 0 | 0 | 0 | 0 | 1,575 | 0 | 524 | 3,275 | 50,448 | 184 |
| Iran | [5] 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | [5] 25 | [5] (s) |
| Nigeria | 148,703 | 0 | 603 | 0 | 0 | 0 | 0 | 256 | 2,217 | 0 | 0 | 3,076 | 151,779 | 554 |
| Venezuela | 127,963 | 1,607 | 14,640 | 867 | 13,270 | 7,054 | 0 | 22,279 | 25,282 | 3 | 5,410 | 90,412 | 218,375 | 797 |
| Subtotal Other OPEC | 336,371 | 1,607 | 16,419 | 867 | 13,270 | 7,054 | 0 | 22,535 | 32,899 | 3 | 5,934 | 100,588 | 436,959 | 1,595 |
| **Other** | | | | | | | | | | | | | | |
| Angola | 52,588 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,116 | 0 | 0 | 2,116 | 54,704 | 200 |
| Argentina | 425 | 0 | 0 | 18 | 415 | 0 | 0 | 0 | 1,006 | 297 | 17 | 1,753 | 2,178 | 8 |
| Australia | 13,661 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 868 | 0 | 131 | 999 | 14,660 | 54 |
| Bahama Islands | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 7,806 | 0 | 0 | 7,814 | 7,814 | 29 |
| Bahrain | 0 | 0 | 275 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 275 | 275 | 1 |
| Belgium | 0 | 0 | 3,173 | 482 | 1,368 | 0 | 0 | 0 | 1,304 | 0 | 15 | 6,342 | 6,342 | 23 |
| Benin | 956 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 956 | 3 |
| Bermuda | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 7 | (s) |
| Brazil | 0 | 548 | 15 | 23 | 19,590 | 0 | 219 | 1,065 | 4,605 | 70 | 66 | 26,201 | 26,201 | 96 |
| Brunei | 338 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 338 | 1 |
| Cameroon | 9,557 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,901 | 0 | 0 | 1,901 | 11,458 | 42 |
| Canada | 187 078 | 32,252 | 1,856 | 21 | 12,492 | 2,695 | 197 | 17,159 | 10,123 | 1,000 | 3,286 | 81,081 | 268,159 | 979 |
| China, People's Republic of | 22,522 | 1 | 0 | 307 | 1,162 | 0 | 0 | 0 | 0 | 0 | 244 | 1,714 | 24,236 | 88 |
| China, Taiwan | 0 | 45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 58 | 103 | 103 | (s) |
| Colombia | 25,912 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7,304 | 0 | 0 | 7,304 | 33,216 | 121 |
| Congo | 10,747 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 602 | 0 | 0 | 602 | 11,349 | 41 |
| Egypt | 6,243 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 8 | 6,251 | 23 |
| Finland | 0 | 0 | 0 | 0 | 292 | 0 | 0 | 0 | 0 | 0 | 0 | 292 | 292 | 1 |
| France | 0 | 36 | 0 | 105 | 1,837 | 0 | 0 | 0 | 1,416 | 0 | 173 | 3,567 | 3,567 | 13 |
| Germany DR (E) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 944 | 0 | 0 | 0 | 944 | 944 | 3 |
| Germany FD (W) | 0 | 13 | 359 | 0 | 310 | 0 | 0 | 0 | 1,079 | 26 | 52 | 1,839 | 1,839 | 7 |
| Ghana | 0 | 0 | 151 | 0 | 0 | 0 | 0 | 0 | 298 | 0 | 0 | 449 | 449 | 2 |
| Greece | 0 | 0 | 239 | 0 | 2,187 | 0 | 0 | 134 | 1,962 | 0 | 0 | 4,522 | 4,522 | 17 |
| Guatemala | 640 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 640 | 2 |
| Hong Kong | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | (s) | (s) |
| Hungary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 5 | (s) |
| India | 100 | 0 | 5,098 | 0 | 0 | 0 | 0 | 0 | 0 | 1,548 | 825 | 7,471 | 7,571 | 28 |
| Ireland | 0 | 0 | 174 | 0 | 0 | 0 | 0 | 0 | 203 | 0 | 0 | 377 | 377 | 1 |
| Israel | 0 | 0 | 0 | 0 | 1,084 | 0 | 0 | 0 | 0 | 36 | 0 | 1,120 | 1,120 | 4 |
| Italy | 1,578 | 1 | 4,544 | 33 | 7,740 | 550 | 0 | 981 | 1,451 | 94 | 110 | 15,503 | 17,081 | 62 |
| Japan | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 57 | 0 | 22 | 408 | 507 | 507 | 2 |

See footnotes at end of table.

## Table 19. Year-to-Date Imports of Crude Oil and Petroleum Products by Source and PAD District,[1] January - September 1988 (continued)

(Thousand Barrels)

| Source | Crude Oil [2] | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Products [3] | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **All PAD Districts (continued)** | | | | | | | | | | | | | |
| **Other (continued)** | | | | | | | | | | | | | | |
| Korea, Republic of | 0 | 9 | 0 | 0 | 0 | 258 | 0 | 0 | 0 | 0 | 147 | 414 | 414 | 2 |
| Liberia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 210 | 0 | 0 | 0 | 210 | 210 | 1 |
| Malaysia | 1,964 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,964 | 7 |
| Mauritania | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 245 | 0 | 0 | 245 | 245 | 1 |
| Mexico | 183,082 | 6,935 | 0 | 440 | 900 | 3,105 | 0 | 1,447 | 3,829 | 0 | 1,984 | 18,640 | 201,722 | 736 |
| Netherlands Antilles | 0 | 0 | 0 | 0 | 981 | 0 | 0 | 676 | 5,743 | 0 | 143 | 7,543 | 7,543 | 28 |
| Netherlands | 0 | 11 | 826 | 66 | 9,547 | 0 | 151 | 1,182 | 1,841 | 146 | 326 | 14,096 | 14,096 | 51 |
| Norway | 14,175 | 0 | 488 | 0 | 0 | 0 | 0 | 0 | 273 | 0 | 569 | 1,330 | 15,505 | 57 |
| Oman | 2,439 | 0 | 986 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 986 | 3,425 | 13 |
| Panama | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 10 | 10 | (s) |
| Peru | 1,509 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7,065 | 0 | 0 | 7,065 | 8,574 | 31 |
| Philippines | 0 | 74 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 74 | 74 | (s) |
| Portugal | 0 | 0 | 0 | 22 | 221 | 0 | 0 | 0 | 236 | 28 | 45 | 552 | 552 | 2 |
| Puerto Rico | 0 | 0 | 1,085 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,628 | 5,713 | 5,713 | 21 |
| Romania | 0 | 0 | 0 | 9,913 | 4,325 | 0 | 0 | 1,283 | 1,140 | 0 | 0 | 16,661 | 16,661 | 61 |
| Singapore | 0 | 0 | 601 | 13 | 0 | 669 | 0 | 0 | 2,225 | 0 | 0 | 3,508 | 3,508 | 13 |
| South Africa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 210 | 0 | 89 | 299 | 299 | 1 |
| Spain | 0 | 40 | 2,829 | 142 | 8,253 | 1,475 | 0 | 219 | 2,696 | 0 | 1,446 | 17,100 | 17,100 | 62 |
| Sweden | 0 | 2 | 146 | 0 | 257 | 0 | 0 | 372 | 1,146 | 0 | 250 | 2,173 | 2,173 | 8 |
| Switzerland | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | (s) |
| Syria | 1,148 | 0 | 538 | 0 | 0 | 0 | 0 | 0 | 194 | 0 | 0 | 732 | 1,880 | 7 |
| Thailand | 981 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 981 | 4 |
| Trinidad and Tobago | 19,682 | 0 | 0 | 0 | 327 | 633 | 115 | 584 | 5,108 | 0 | 3 | 6,770 | 26,452 | 97 |
| Tunisia | 0 | 0 | 220 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 220 | 220 | 1 |
| Turkey | 0 | 0 | 1,878 | 0 | 0 | 0 | 0 | 0 | 230 | 34 | 184 | 2,326 | 2,326 | 8 |
| United Kingdom | 70,036 | 10 | 1,537 | 0 | 6,306 | 244 | 0 | 1,238 | 3,764 | 68 | 206 | 13,373 | 83,409 | 304 |
| U.S.S.R. | 0 | 0 | 1,287 | 0 | 395 | 0 | 0 | 3,522 | 744 | 8 | 0 | 5,956 | 5,956 | 22 |
| Virgin Islands | 0 | 0 | 14,300 | 3,050 | 7,688 | 3,307 | 2,202 | 10,383 | 19,763 | 0 | 0 | 60,693 | 60,693 | 222 |
| Yemen (Sanaa) | 6,017 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6,017 | 22 |
| Zaire | 7,843 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7,843 | 29 |
| Subtotal Other | 641,221 | 39,997 | 42,612 | 14,635 | 87,677 | 12,936 | 2,884 | 41,464 | 100,506 | 3,377 | 15,420 | 361,508 | 1,002,729 | 3,660 |
| **Total Imports** | **1,362,297** | **55,314** | **97,273** | **15,837** | **107,340** | **23,080** | **3,209** | **71,201** | **148,705** | **3,380** | **35,242** | **560,581** | **1,922,878** | **7,018** |
| | **PAD District I** | | | | | | | | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Algeria | 0 | 2,810 | 6,665 | 0 | 0 | 289 | 0 | 3,265 | 13,217 | 0 | 0 | 26,246 | 26,246 | 96 |
| Iraq | 6,320 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6,320 | 23 |
| Neutral Zone[4] | 650 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 650 | 2 |
| Saudi Arabia | 26,224 | 2,239 | 355 | 335 | 5,267 | 1,650 | 325 | 3,595 | 0 | 0 | 0 | 13,766 | 39,990 | 146 |
| United Arab Emirates | 1,427 | 0 | 0 | 0 | 0 | 0 | 0 | 342 | 0 | 0 | 0 | 342 | 1,769 | 6 |
| Subtotal Arab OPEC | 34,621 | 5,050 | 7,020 | 335 | 5,267 | 1,939 | 325 | 7,202 | 13,217 | 0 | 0 | 40,355 | 74,976 | 274 |
| **Other OPEC** | | | | | | | | | | | | | | |
| Ecuador | 4,935 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,825 | 0 | 0 | 3,825 | 8,760 | 32 |
| Gabon | 2,551 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,551 | 9 |
| Indonesia | 1,964 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,575 | 0 | 0 | 1,575 | 3,539 | 13 |
| Nigeria | 85,716 | 0 | 0 | 0 | 0 | 0 | 0 | 256 | 2,217 | 0 | 0 | 2,473 | 88,189 | 322 |

See footnotes at end of table.

## Table 19. Year-to-Date Imports of Crude Oil and Petroleum Products by Source and PAD District,[1] January - September 1988 (continued)
(Thousand Barrels)

| Source | Crude Oil [2] | LPG | Unfin- ished Oils | Gasoline Blending Compo- nents | Finished Motor Gasoline | Jet Fuel | Kero- sene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Prod- ucts [3] | Total Prod- ucts | Total Petro- leum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PAD District I (continued) | | | | | | | | | | | | | |
| **Other OPEC** | | | | | | | | | | | | | | |
| Venezuela | 35,146 | 817 | 3,102 | 159 | 11,203 | 5,189 | 0 | 22,277 | 24,762 | 3 | 5,045 | 72,556 | 107,702 | 393 |
| Subtotal Other OPEC | 130,312 | 817 | 3,102 | 159 | 11,203 | 5,189 | 0 | 22,533 | 32,379 | 3 | 5,045 | 80,429 | 210,741 | 769 |
| **Other** | | | | | | | | | | | | | | |
| Angola | 25,702 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,116 | 0 | 0 | 2,116 | 27,818 | 102 |
| Argentina | 425 | 0 | 0 | 18 | 415 | 0 | 0 | 0 | 1,006 | 35 | 0 | 1,474 | 1,899 | 7 |
| Australia | 1,298 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 182 | 0 | 80 | 262 | 1,560 | 6 |
| Bahama Islands | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 7,579 | 0 | 0 | 7,587 | 7,587 | 28 |
| Belgium | 0 | 0 | 1,360 | 274 | 1,368 | 0 | 0 | 0 | 1,304 | 0 | 0 | 4,306 | 4,306 | 16 |
| Benin | 643 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 643 | 2 |
| Brazil | 0 | 0 | 15 | 0 | 17,821 | 0 | 219 | 1,065 | 4,605 | 17 | 59 | 23,801 | 23,801 | 87 |
| Cameroon | 6,131 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,901 | 0 | 0 | 1,901 | 8,032 | 29 |
| Canada | 17,985 | 3,474 | 582 | 0 | 9,800 | 1,551 | 197 | 13,856 | 8,297 | 95 | 1,654 | 39,506 | 57,491 | 210 |
| China, People's Republic of | 8,539 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 98 | 98 | 8,637 | 32 |
| China, Taiwan | 0 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 30 | (s) |
| Colombia | 6,387 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7,304 | 0 | 0 | 7,304 | 13,691 | 50 |
| Congo | 2,353 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 602 | 0 | 0 | 602 | 2,955 | 11 |
| Egypt | 5,060 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 | 5,064 | 18 |
| Finland | 0 | 0 | 0 | 0 | 292 | 0 | 0 | 0 | 0 | 0 | 0 | 292 | 292 | 1 |
| France | 0 | 2 | 0 | 105 | 1,705 | 0 | 0 | 0 | 1,416 | 0 | 50 | 3,278 | 3,278 | 12 |
| Germany DR (E) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 944 | 0 | 0 | 0 | 944 | 944 | 3 |
| Germany FD (W) | 0 | 12 | 0 | 0 | 310 | 0 | 0 | 0 | 827 | 22 | 18 | 1,189 | 1,189 | 4 |
| Ghana | 0 | 0 | 133 | 0 | 0 | 0 | 0 | 0 | 298 | 0 | 0 | 431 | 431 | 2 |
| Greece | 0 | 0 | 0 | 0 | 2,187 | 0 | 0 | 134 | 1,962 | 0 | 0 | 4,283 | 4,283 | 16 |
| Hungary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 5 | (s) |
| India | 0 | 0 | 569 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 569 | 569 | 2 |
| Ireland | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 203 | 0 | 0 | 203 | 203 | 1 |
| Israel | 0 | 0 | 0 | 0 | 1,084 | 0 | 0 | 0 | 0 | 0 | 0 | 1,084 | 1,084 | 4 |
| Italy | 1,227 | 1 | 2,176 | 33 | 7,740 | 0 | 0 | 981 | 1,451 | 14 | 20 | 12,416 | 13,643 | 50 |
| Japan | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 76 | 81 | 81 | (s) |
| Korea, Republic of | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | (s) |
| Liberia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 210 | 0 | 0 | 0 | 210 | 210 | 1 |
| Mauritania | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 245 | 0 | 0 | 245 | 245 | 1 |
| Mexico | 21,574 | 0 | 0 | 0 | 309 | 857 | 0 | 1,347 | 2,124 | 0 | 1,595 | 6,232 | 27,806 | 101 |
| Netherlands Antilles | 0 | 0 | 0 | 0 | 464 | 0 | 0 | 676 | 5,743 | 0 | 84 | 6,967 | 6,967 | 25 |
| Netherlands | 0 | 6 | 668 | 66 | 8,839 | 0 | 151 | 1,182 | 1,841 | 131 | 45 | 12,929 | 12,929 | 47 |
| Norway | 8,388 | 0 | 213 | 0 | 0 | 0 | 0 | 0 | 273 | 0 | 569 | 1,055 | 9,443 | 34 |
| Oman | 839 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 839 | 3 |
| Panama | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 10 | 10 | (s) |
| Peru | 380 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7,065 | 0 | 0 | 7,065 | 7,445 | 27 |
| Portugal | 0 | 0 | 0 | 0 | 221 | 0 | 0 | 0 | 236 | 0 | 0 | 457 | 457 | 2 |
| Puerto Rico | 0 | 0 | 982 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,877 | 4,859 | 4,859 | 18 |
| Romania | 0 | 0 | 0 | 9,913 | 4,325 | 0 | 0 | 1,283 | 1,140 | 0 | 0 | 16,661 | 16,661 | 61 |
| Singapore | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 402 | 0 | 0 | 402 | 402 | 1 |
| South Africa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 210 | 0 | 49 | 259 | 259 | 1 |
| Spain | 0 | 2 | 1,002 | 142 | 8,252 | 1,137 | 0 | 219 | 2,695 | 0 | 1,327 | 14,776 | 14,776 | 54 |
| Sweden | 0 | 1 | 146 | 0 | 257 | 0 | 0 | 372 | 1,146 | 0 | 0 | 1,922 | 1,922 | 7 |
| Switzerland | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | (s) |

See footnotes at end of table.

## Table 19. Year-to-Date Imports of Crude Oil and Petroleum Products by Source and PAD District,[1] January - September 1988 (continued)

(Thousand Barrels)

| Source | Crude Oil [2] | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Products [3] | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PAD District I (continued)** | | | | | | | | | | | | | | |
| **Other (continued)** | | | | | | | | | | | | | | |
| Syria | 1,148 | 0 | 538 | 0 | 0 | 0 | 0 | 0 | 194 | 0 | 0 | 732 | 1,880 | 7 |
| Trinidad and Tobago | 4,408 | 0 | 0 | 0 | 327 | 300 | 115 | 584 | 5,108 | 0 | 3 | 6,437 | 10,845 | 40 |
| Turkey | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 230 | 0 | 0 | 230 | 230 | 1 |
| United Kingdom | 33,017 | 4 | 4 | 0 | 6,306 | 244 | 0 | 1,238 | 3,149 | 68 | 77 | 11,090 | 44,107 | 161 |
| U.S.S.R. | 0 | 0 | 0 | 0 | 395 | 0 | 0 | 3,522 | 27 | 8 | 0 | 3,952 | 3,952 | 14 |
| Virgin Islands | 0 | 0 | 13,884 | 3,050 | 7,688 | 3,078 | 1,259 | 10,383 | 19,763 | 0 | 0 | 59,105 | 59,105 | 216 |
| Yemen (Sanaa) | 2,713 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,713 | 10 |
| Zaire | 4,318 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,318 | 16 |
| Subtotal Other | 152,535 | 3,536 | 22,272 | 13,601 | 80,105 | 7,167 | 1,941 | 38,004 | 92,654 | 394 | 9,692 | 269,367 | 421,902 | 1,540 |
| **Total Imports** | **317,468** | **9,403** | **32,394** | **14,095** | **96,575** | **14,295** | **2,266** | **67,739** | **138,250** | **397** | **14,737** | **390,151** | **707,619** | **2,583** |
| **PAD District II** | | | | | | | | | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Algeria | 3,589 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,589 | 13 |
| Iraq | 7,910 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7,910 | 29 |
| Kuwait | 656 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 656 | 2 |
| Saudi Arabia | 39,471 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 39,471 | 144 |
| United Arab Emirates | 177 | 0 | 0 | 0 | 0 | 592 | 0 | 0 | 0 | 0 | 0 | 592 | 769 | 3 |
| Subtotal Arab OPEC | 51,803 | 0 | 0 | 0 | 0 | 592 | 0 | 0 | 0 | 0 | 0 | 592 | 52,395 | 191 |
| **Other OPEC** | | | | | | | | | | | | | | |
| Ecuador | 1,170 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,170 | 4 |
| Indonesia | 659 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 659 | 2 |
| Nigeria | 19,840 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19,840 | 72 |
| Venezuela | 1,813 | 0 | 634 | 0 | 0 | 1,140 | 0 | 0 | 0 | 0 | 0 | 1,774 | 3,587 | 13 |
| Subtotal Other OPEC | 23,482 | 0 | 634 | 0 | 0 | 1,140 | 0 | 0 | 0 | 0 | 0 | 1,774 | 25,256 | 92 |
| **Other** | | | | | | | | | | | | | | |
| Cameroon | 417 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 417 | 2 |
| Canada | 144,166 | 23,354 | 0 | 21 | 924 | 774 | 0 | 1,404 | 895 | 476 | 852 | 28,700 | 172,866 | 631 |
| Colombia | 472 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 472 | 2 |
| Congo | 480 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 480 | 2 |
| Egypt | 491 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 491 | 2 |
| France | 0 | 34 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 34 | 34 | (s) |
| Italy | 0 | 0 | 0 | 0 | 0 | 132 | 0 | 0 | 0 | 0 | 0 | 132 | 132 | (s) |
| Japan | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | (s) | (s) |
| Mexico | 14,210 | 0 | 0 | 0 | 0 | 1,283 | 0 | 0 | 0 | 0 | 0 | 1,283 | 15,493 | 57 |
| Norway | 447 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 447 | 2 |
| Peru | 1,129 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,129 | 4 |
| Puerto Rico | 0 | 0 | 103 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 103 | 103 | (s) |
| South Africa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 33 | 33 | (s) |
| Spain | 0 | 0 | 0 | 0 | 0 | 251 | 0 | 0 | 0 | 0 | 119 | 370 | 370 | 1 |
| Sweden | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | (s) |
| Trinidad and Tobago | 176 | 0 | 0 | 0 | 0 | 333 | 0 | 0 | 0 | 0 | 0 | 333 | 509 | 2 |
| United Kingdom | 5,011 | 6 | 368 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 374 | 5,385 | 20 |
| Yemen (Sanaa) | 2,102 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,102 | 8 |

See footnotes at end of table.

### Table 19. Year-to-Date Imports of Crude Oil and Petroleum Products by Source and PAD District,[1] January - September 1988 (continued)
(Thousand Barrels)

| Source | Crude Oil [2] | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Products [3] | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PAD District II (continued)** | | | | | | | | | | | | | | |
| **Other (continued)** | | | | | | | | | | | | | | |
| Zaire | 481 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 481 | 2 |
| Subtotal Other | 169,582 | 23,395 | 471 | 21 | 924 | 2,773 | 0 | 1,404 | 895 | 476 | 1,004 | 31,363 | 200,945 | 733 |
| **Total Imports** | **244,867** | **23,395** | **1,105** | **21** | **924** | **4,506** | **0** | **1,404** | **895** | **476** | **1,004** | **33,730** | **278,597** | **1,017** |
| **PAD District III** | | | | | | | | | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Algeria | 29,290 | 2,889 | 1,066 | 0 | 0 | 0 | 0 | 0 | 2,083 | 0 | 13,015 | 19,053 | 48,343 | 176 |
| Iraq | 73,718 | 0 | 807 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 807 | 74,525 | 272 |
| Kuwait | 19,312 | 790 | 2,637 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,427 | 22,739 | 83 |
| Neutral Zone[4] | 2,624 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,624 | 10 |
| Saudi Arabia | 167,508 | 4,981 | 26,139 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 660 | 31,780 | 199,288 | 727 |
| United Arab Emirates | 5,379 | 0 | 573 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 213 | 786 | 6,165 | 23 |
| Subtotal Arab OPEC | 297,831 | 8,660 | 31,222 | 0 | 0 | 0 | 0 | 0 | 2,083 | 0 | 13,888 | 55,853 | 353,684 | 1,291 |
| **Other OPEC** | | | | | | | | | | | | | | |
| Ecuador | 1,412 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,412 | 5 |
| Gabon | 2,439 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,439 | 9 |
| Indonesia | 16,103 | 0 | 922 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 922 | 17,025 | 62 |
| Iran | [5] 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | [5] 25 | [5] (s) |
| Nigeria | 43,147 | 0 | 603 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 603 | 43,750 | 160 |
| Venezuela | 91,004 | 790 | 10,904 | 708 | 1,811 | 0 | 0 | 2 | 520 | 0 | 154 | 14,889 | 105,893 | 386 |
| Subtotal Other OPEC | 154,130 | 790 | 12,429 | 708 | 1,811 | 0 | 0 | 2 | 520 | 0 | 154 | 16,414 | 170,544 | 622 |
| **Other** | | | | | | | | | | | | | | |
| Angola | 26,886 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26,886 | 98 |
| Argentina | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 262 | 17 | 279 | 279 | 1 |
| Australia | 6,238 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 51 | 51 | 6,289 | 23 |
| Bahama Islands | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 227 | 0 | 0 | 227 | 227 | 1 |
| Bahrain | 0 | 0 | 275 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 275 | 275 | 1 |
| Belgium | 0 | 0 | 1,813 | 208 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 2,036 | 2,036 | 7 |
| Benin | 313 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 313 | 1 |
| Bermuda | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 7 | (s) |
| Brazil | 0 | 548 | 0 | 23 | 747 | 0 | 0 | 0 | 0 | 53 | 7 | 1,378 | 1,378 | 5 |
| Cameroon | 3,009 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,009 | 11 |
| Canada | 3,510 | 1 | 1,274 | 0 | 0 | 0 | 0 | 600 | 701 | 349 | 251 | 3,176 | 6,686 | 24 |
| China, People's Republic of | 11,851 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 146 | 146 | 11,997 | 44 |
| Colombia | 19,053 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19,053 | 70 |
| Congo | 7,914 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7,914 | 29 |
| Egypt | 692 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 | 696 | 3 |
| France | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 123 | 123 | 123 | (s) |
| Germany FD (W) | 0 | 1 | 359 | 0 | 0 | 0 | 0 | 0 | 252 | 4 | 34 | 650 | 650 | 2 |
| Ghana | 0 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 18 | (s) |
| Greece | 0 | 0 | 239 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 239 | 239 | 1 |
| Guatemala | 640 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 640 | 2 |
| India | 100 | 0 | 4,529 | 0 | 0 | 0 | 0 | 0 | 0 | 1,548 | 825 | 6,902 | 7,002 | 26 |

See footnotes at end of table.

## Table 19. Year-to-Date Imports of Crude Oil and Petroleum Products by Source and PAD District,[1] January - September 1988 (continued)

(Thousand Barrels)

| Source | Crude Oil [2] | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Products [3] | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PAD District III (continued)** | | | | | | | | | | | | | | |
| **Other (continued)** | | | | | | | | | | | | | | |
| Ireland | 0 | 0 | 174 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 174 | 174 | 1 |
| Israel | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 36 | 0 | 36 | 36 | (s) |
| Italy | 351 | 0 | 2,368 | 0 | 0 | 0 | 0 | 0 | 0 | 80 | 90 | 2,538 | 2,889 | 11 |
| Japan | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 160 | 178 | 178 | 1 |
| Malaysia | 424 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 424 | 2 |
| Mexico | 147,298 | 6,935 | 0 | 440 | 202 | 676 | 0 | 0 | 1,701 | 0 | 140 | 10,094 | 157,392 | 574 |
| Netherlands Antilles | 0 | 0 | 0 | 0 | 248 | 0 | 0 | 0 | 0 | 0 | 59 | 307 | 307 | 1 |
| Netherlands | 0 | 0 | 158 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 281 | 454 | 454 | 2 |
| Norway | 5,340 | 0 | 275 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 275 | 5,615 | 20 |
| Oman | 1,600 | 0 | 986 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 986 | 2,586 | 9 |
| Portugal | 0 | 0 | 0 | 22 | 0 | 0 | 0 | 0 | 0 | 28 | 45 | 95 | 95 | (s) |
| Puerto Rico | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 751 | 751 | 751 | 3 |
| South Africa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 | 4 | (s) |
| Spain | 0 | 38 | 1,827 | 0 | 1 | 86 | 0 | 0 | 1 | 0 | 0 | 1,954 | 1,954 | 7 |
| Sweden | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 250 | 250 | 250 | 1 |
| Trinidad and Tobago | 15,098 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15,098 | 55 |
| Tunisia | 0 | 0 | 220 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 220 | 220 | 1 |
| Turkey | 0 | 0 | 1,878 | 0 | 0 | 0 | 0 | 0 | 0 | 34 | 184 | 2,096 | 2,096 | 8 |
| United Kingdom | 32,008 | 0 | 1,165 | 0 | 0 | 0 | 0 | 0 | 615 | 0 | 129 | 1,909 | 33,917 | 124 |
| U.S.S.R. | 0 | 0 | 1,287 | 0 | 0 | 0 | 0 | 0 | 717 | 0 | 0 | 2,004 | 2,004 | 7 |
| Virgin Islands | 0 | 0 | 416 | 0 | 0 | 229 | 943 | 0 | 0 | 0 | 0 | 1,588 | 1,588 | 6 |
| Yemen (Sanaa) | 1,202 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,202 | 4 |
| Zaire | 3,044 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,044 | 11 |
| Subtotal Other | 286,571 | 7,524 | 19,268 | 693 | 1,198 | 991 | 943 | 600 | 4,214 | 2,427 | 3,566 | 41,424 | 327,995 | 1,197 |
| **Total Imports** | **738,532** | **16,974** | **62,919** | **1,401** | **3,009** | **991** | **943** | **602** | **6,817** | **2,427** | **17,608** | **113,691** | **852,223** | **3,110** |
| **PAD District IV** | | | | | | | | | | | | | | |
| **Other** | | | | | | | | | | | | | | |
| Canada | 17,147 | 3,247 | 0 | 0 | 459 | 0 | 0 | 605 | 2 | 1 | 234 | 4,548 | 21,695 | 79 |
| China, People's Republic of | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | (s) |
| Subtotal Other | 17,147 | 3,247 | 0 | 0 | 459 | 0 | 0 | 605 | 2 | 1 | 234 | 4,548 | 21,695 | 79 |
| **Total Imports** | **17,147** | **3,247** | **0** | **0** | **459** | **0** | **0** | **605** | **2** | **1** | **234** | **4,548** | **21,695** | **79** |
| **PAD District V** | | | | | | | | | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Saudi Arabia | 0 | 0 | 0 | 0 | 1,126 | 559 | 0 | 0 | 0 | 0 | 0 | 1,685 | 1,685 | 6 |
| United Arab Emirates | 450 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 450 | 2 |
| Subtotal Arab OPEC | 450 | 0 | 0 | 0 | 1,126 | 559 | 0 | 0 | 0 | 0 | 0 | 1,685 | 2,135 | 8 |

See footnotes at end of table.

## Table 19. Year-to-Date Imports of Crude Oil and Petroleum Products by Source and PAD District,[1] January - September 1988 (continued)

(Thousand Barrels)

| Source | Crude Oil [2] | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Products [3] | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | **PAD District V (continued)** | | | | | | | | | |
| **Other OPEC** | | | | | | | | | | | | | | |
| Indonesia | 28,447 | 0 | 254 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 524 | 778 | 29,225 | 107 |
| Venezuela | 0 | 0 | 0 | 0 | 256 | 725 | 0 | 0 | 0 | 0 | 211 | 1,192 | 1,192 | 4 |
| Subtotal Other OPEC | 28,447 | 0 | 254 | 0 | 256 | 725 | 0 | 0 | 0 | 0 | 735 | 1,970 | 30,417 | 111 |
| **Other** | | | | | | | | | | | | | | |
| Australia | 6,125 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 686 | 0 | 0 | 686 | 6,811 | 25 |
| Brazil | 0 | 0 | 0 | 0 | 1,022 | 0 | 0 | 0 | 0 | 0 | 0 | 1,022 | 1,022 | 4 |
| Brunei | 338 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 338 | 1 |
| Canada | 4,270 | 2,177 | 0 | 0 | 1,309 | 370 | 0 | 694 | 228 | 79 | 295 | 5,152 | 9,422 | 34 |
| China, People's Republic of | 2,132 | 0 | 0 | 307 | 1,162 | 0 | 0 | 0 | 0 | 0 | 0 | 1,469 | 3,601 | 13 |
| China, Taiwan | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 58 | 74 | 74 | (s) |
| France | 0 | 0 | 0 | 0 | 132 | 0 | 0 | 0 | 0 | 0 | 0 | 132 | 132 | (s) |
| Hong Kong | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | (s) | (s) |
| Italy | 0 | 0 | 0 | 0 | 0 | 418 | 0 | 0 | 0 | 0 | 0 | 418 | 418 | 2 |
| Japan | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 57 | 0 | 0 | 172 | 248 | 248 | 1 |
| Korea, Republic of | 0 | 4 | 0 | 0 | 0 | 258 | 0 | 0 | 0 | 0 | 147 | 409 | 409 | 1 |
| Malaysia | 1,540 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,540 | 6 |
| Mexico | 0 | 0 | 0 | 0 | 389 | 289 | 0 | 100 | 4 | 0 | 249 | 1,031 | 1,031 | 4 |
| Netherlands Antilles | 0 | 0 | 0 | 0 | 269 | 0 | 0 | 0 | 0 | 0 | 0 | 269 | 269 | 1 |
| Netherlands | 0 | 6 | 0 | 0 | 708 | 0 | 0 | 0 | 0 | 0 | 0 | 714 | 714 | 3 |
| Philippines | 0 | 74 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 74 | 74 | (s) |
| Singapore | 0 | 0 | 601 | 13 | 0 | 669 | 0 | 0 | 1,823 | 0 | 0 | 3,106 | 3,106 | 11 |
| South Africa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 3 | (s) |
| Switzerland | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | (s) | (s) |
| Thailand | 981 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 981 | 4 |
| Subtotal Other | 15,386 | 2,295 | 601 | 320 | 4,991 | 2,004 | 0 | 851 | 2,741 | 79 | 924 | 14,806 | 30,192 | 110 |
| **Total Imports** | **44,283** | **2,295** | **855** | **320** | **6,373** | **3,288** | **0** | **851** | **2,741** | **79** | **1,659** | **18,461** | **62,744** | **229** |

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[1] Crude Oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry

[2] Includes crude oil imported for storage in the Strategic Petroleum Reserve.

[3] Includes aviation gasoline, aviation gasoline blending components, waxes, asphalt, lubricants, pentanes plus, naphthas less than 400 degrees F endpoint, other oils equal to or greater than 400 degrees F endpoint, petroleum coke and miscellaneous products.

[4] Beginning in January 1988, imports of crude oil and petroleum products from the Neutral Zone are shown separately. Prior to January 1988, these data were included with imports from Saudi Arabia and Kuwait.

[5] A small amount of Iranian crude oil entered the United States (defined in this publication as the 50 States and the District of Columbia) in January 1988 from the Virgin Islands. This oil originated in Iran and was exported to the Virgin Islands prior to the signing of Executive Order 12613 on Oct. 29, 1987.

(s) = Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 20. Exports of Crude Oil and Petroleum Products by PAD District, September 1988

(Thousand Barrels)

| Commodity | Petroleum Administration for Defense Districts | | | | | | Daily Average |
|---|---|---|---|---|---|---|---|
| | I | II | III | IV | V | Total | |
| Crude Oil (including lease condensate) 1 | 0 | 521 | 0 | 0 | 3,134 | 3,655 | 122 |
| Natural Gas Liquids | 121 | 467 | 535 | 21 | 194 | 1,338 | 45 |
| Pentanes Plus | 0 | 57 | 0 | 0 | 0 | 57 | 2 |
| Liquefied Petroleum Gases | 121 | 410 | 535 | 21 | 194 | 1,281 | 43 |
| Ethane | (s) | 114 | (s) | 0 | (s) | 115 | 4 |
| Propane | 50 | 121 | 500 | 9 | 81 | 760 | 25 |
| Normal Butane | 71 | 117 | 34 | 13 | 113 | 349 | 12 |
| Isobutane | 0 | 57 | 0 | 0 | 0 | 57 | 2 |
| Finished Motor Gasoline | 12 | 8 | 424 | 0 | 27 | 471 | 16 |
| Naphtha-Type Jet Fuel | 1 | 0 | 213 | (s) | 0 | 214 | 7 |
| Kerosene-Type Jet Fuel | (s) | 0 | 153 | 0 | 111 | 265 | 9 |
| Kerosene | 9 | 2 | 30 | 0 | (s) | 41 | 1 |
| Distillate Fuel Oil | 15 | 113 | 1,510 | 0 | 519 | 2,156 | 72 |
| Residual Fuel Oil | 7 | 0 | 584 | 0 | 2,417 | 3,008 | 100 |
| Naphtha < 400 Deg. for Petro. Feed. Use | 38 | 40 | 63 | (s) | 40 | 182 | 6 |
| Other Oils > 400 Deg. for Petro. Feed. Use | 1 | 63 | 268 | 0 | 142 | 474 | 16 |
| Special Naphthas | 106 | 112 | 75 | (s) | 1 | 294 | 10 |
| Lubricants | 201 | 26 | 460 | 2 | 153 | 842 | 28 |
| Waxes | 7 | 3 | 52 | (s) | 8 | 70 | 2 |
| Petroleum Coke | 56 | 180 | 3,482 | 0 | 3,417 | 7,135 | 238 |
| Asphalt | 2 | 37 | (s) | 1 | 1 | 41 | 1 |
| Miscellaneous Products | 33 | 3 | 33 | (s) | 8 | 76 | 3 |
| Total Product Exports | 606 | 1,054 | 7,882 | 25 | 7,039 | 16,605 | 554 |
| **Total Exports** | **606** | **1,575** | **7,882** | **25** | **10,173** | **20,260** | **675** |

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[1] Crude oil exports are restricted to: 1) crude oil derived from fields under the State waters of Alaska's Cook Inlet; 2) certain domestically produced crude oil destined for Canada; and 3) shipments to U.S. territories.

(s) = Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 21. Year-to-Date Exports of Crude Oil and Petroleum Products by PAD District, January - September 1988
(Thousand Barrels)

| Commodity | Petroleum Administration for Defense Districts | | | | | | Daily Average |
|---|---|---|---|---|---|---|---|
| | I | II | III | IV | V | Total | |
| Crude Oil (including lease condensate) 1 | 0 | 3,174 | 0 | 0 | 40,970 | 44,143 | 161 |
| Natural Gas Liquids | 655 | 4,645 | 4,459 | 307 | 1,829 | 11,894 | 43 |
| Pentanes Plus | 0 | 555 | 0 | 0 | 0 | 555 | 2 |
| Liquefied Petroleum Gases | 655 | 4,090 | 4,459 | 307 | 1,829 | 11,339 | 41 |
| Ethane | 6 | 1,112 | 2 | 0 | (s) | 1,121 | 4 |
| Propane | 279 | 1,239 | 4,190 | 123 | 807 | 6,638 | 24 |
| Normal Butane | 369 | 1,184 | 267 | 184 | 1,022 | 3,026 | 11 |
| Isobutane | 0 | 555 | 0 | 0 | 0 | 555 | 2 |
| Finished Motor Gasoline | 178 | 650 | 4,057 | 1 | 935 | 5,820 | 21 |
| Naphtha-Type Jet Fuel | 9 | 0 | 245 | 1 | 80 | 335 | 1 |
| Kerosene-Type Jet Fuel | 269 | 3 | 4,833 | (s) | 1,803 | 6,909 | 25 |
| Kerosene | 78 | 128 | 43 | 1 | 2 | 253 | 1 |
| Distillate Fuel Oil | 282 | 362 | 9,842 | 1 | 9,399 | 19,885 | 73 |
| Residual Fuel Oil | 29 | 0 | 16,893 | 0 | 37,816 | 54,739 | 200 |
| Naphtha < 400 Deg. for Petro. Feed. Use | 459 | 226 | 518 | 9 | 156 | 1,368 | 5 |
| Other Oils > 400 Deg. for Petro. Feed. Use | 16 | 306 | 2,785 | 0 | 1,557 | 4,664 | 17 |
| Special Naphthas | 282 | 157 | 731 | 2 | 583 | 1,755 | 6 |
| Lubricants | 1,862 | 384 | 3,353 | 32 | 1,326 | 6,957 | 25 |
| Waxes | 53 | 106 | 243 | (s) | 72 | 473 | 2 |
| Petroleum Coke | 1,815 | 1,360 | 36,239 | 2 | 24,654 | 64,070 | 234 |
| Asphalt | 9 | 169 | 9 | 7 | 53 | 247 | 1 |
| Miscellaneous Products | 284 | 22 | 155 | 1 | 47 | 508 | 2 |
| Total Product Exports | 6,279 | 8,517 | 84,406 | 362 | 80,313 | 179,877 | 656 |
| **Total Exports** | **6,279** | **11,691** | **84,406** | **362** | **121,283** | **224,020** | **818** |

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[1] Crude oil exports are restricted to: 1) crude oil derived from fields under the State waters of Alaska's Cook Inlet; 2) certain domestically produced crude oil destined for Canada; and 3) shipments to U.S. territories.

(s) = Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 22. Exports of Crude Oil and Petroleum Products by Destination, September 1988
(Thousand Barrels)

| Destination | Crude Oil 1 | LPG | Finished Motor Gasoline | Jet Fuel | Dist. Fuel Oil | Residual Fuel Oil | Special Naphthas | Lubricants | Waxes | Petroleum Coke | Asphalt | Other2 | Total | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Argentina | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 5 | (s) | 1 | 0 | 1 | 7 | (s) |
| Australia | 0 | 3 | 0 | 0 | 0 | 0 | 14 | 22 | 1 | 139 | (s) | 11 | 189 | 6 |
| Bahama Islands | 0 | 18 | 32 | 23 | 80 | 221 | 0 | 5 | 0 | 0 | 0 | (s) | 379 | 13 |
| Bahrain | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 0 | 64 | 0 | 0 | 64 | 2 |
| Belgium & Luxembourg | 0 | 2 | (s) | 0 | 0 | 0 | 15 | 10 | (s) | 569 | 0 | 2 | 598 | 20 |
| Brazil | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 18 | 0 | 66 | 0 | (s) | 86 | 3 |
| Cameroon | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Canada | 521 | 540 | 46 | 112 | 126 | 234 | 116 | 96 | 5 | 379 | 38 | 179 | 2,392 | 80 |
| Chile | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 29 | 2 | 0 | 0 | 1 | 34 | 1 |
| China, Taiwan | 0 | 13 | 0 | 0 | 199 | 1,318 | (s) | 39 | 11 | 1 | (s) | 3 | 1,584 | 53 |
| Colombia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | (s) | 0 | (s) | 13 | (s) |
| Costa Rica | 0 | (s) | 11 | 0 | 0 | 0 | 0 | 4 | (s) | 0 | (s) | 6 | 22 | 1 |
| Denmark | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | (s) | 0 | 0 | (s) | 1 | (s) |
| Dominican Republic | 0 | 0 | 0 | 0 | (s) | 0 | 0 | 2 | 0 | 0 | 0 | (s) | 3 | (s) |
| Ecuador | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | (s) | 0 | 0 | (s) | 3 | (s) |
| Egypt | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | (s) | 0 | 0 | 0 | (s) | (s) |
| El Salvador | 0 | 17 | 89 | 0 | 78 | 0 | 0 | (s) | 0 | 0 | 0 | 30 | 214 | 7 |
| Finland | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 0 | (s) | 0 | (s) | (s) |
| France | 0 | 1 | 0 | 0 | 0 | 0 | (s) | 3 | 1 | 810 | 0 | 87 | 901 | 30 |
| French Pacific Isl | 0 | (s) | 0 | 0 | 0 | 23 | 0 | (s) | 0 | 0 | 0 | 0 | 23 | 1 |
| Germany FD (W) | 0 | 4 | (s) | 0 | 0 | 0 | 0 | 5 | 22 | 63 | 0 | 29 | 123 | 4 |
| Ghana | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | (s) |
| Greece | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | (s) |
| Guatemala | 0 | 25 | 139 | 26 | 201 | 0 | 0 | 5 | 0 | 0 | 0 | 2 | 398 | 13 |
| Honduras | 0 | 7 | 0 | 0 | 0 | 0 | (s) | 1 | (s) | 0 | 0 | 3 | 11 | (s) |
| Hong Kong | 0 | 2 | 0 | 0 | 0 | 0 | (s) | 6 | (s) | (s) | 0 | 1 | 9 | (s) |
| India | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 46 | (s) | 0 | 0 | 8 | 54 | 2 |
| Iran | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Israel | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 4 | (s) | 148 | 0 | (s) | 153 | 5 |
| Italy | 0 | 1 | 0 | 0 | 0 | 0 | (s) | 1 | 2 | 659 | (s) | 9 | 672 | 22 |
| Ivory Coast | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 0 | 0 | 0 | (s) | (s) |
| Jamaica | 0 | 15 | 70 | 0 | 77 | 0 | (s) | 19 | (s) | 0 | 0 | 1 | 182 | 6 |
| Japan | 0 | 13 | 30 | (s) | 284 | 153 | 35 | 80 | 2 | 1,850 | (s) | 72 | 2,519 | 84 |
| Jordan | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 0 | 0 | (s) | (s) | (s) |
| Korea, Republic of | 0 | 57 | 0 | 0 | 0 | 38 | 1 | 6 | (s) | 56 | 0 | 120 | 278 | 9 |
| Kuwait | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | (s) | 2 | (s) |
| Lebanon | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | (s) |
| Liberia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 0 | 0 | 0 | (s) | (s) |
| Malaysia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 11 | (s) | (s) | 13 | (s) |
| Mexico | 0 | 495 | 20 | (s) | (s) | 652 | 7 | 88 | 18 | 83 | 0 | 12 | 1,375 | 46 |
| Netherlands | 0 | 1 | 0 | 0 | 0 | 0 | 98 | 14 | (s) | 993 | 1 | 31 | 1,137 | 38 |
| Netherlands Antilles | 0 | 0 | 0 | 0 | 0 | 314 | 0 | 1 | 0 | 0 | 0 | (s) | 315 | 11 |
| New Zealand | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 0 | 0 | 0 | 3 | 9 | (s) |
| Nigeria | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 4 | (s) |
| Norway | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 160 | 0 | 1 | 161 | 5 |
| Pacific Trust Terr. | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | (s) |
| Panama | 0 | (s) | 0 | 0 | 200 | 50 | 0 | 32 | (s) | 0 | (s) | 7 | 289 | 10 |
| Peru | 0 | 0 | 20 | 213 | 909 | 0 | 0 | 34 | (s) | 0 | 0 | (s) | 1,175 | 39 |
| Philippines | 0 | (s) | 0 | 0 | 0 | 0 | (s) | 1 | 1 | 27 | (s) | 2 | 33 | 1 |
| Puerto Rico | 390 | 10 | 12 | 104 | (s) | 5 | (s) | 42 | 2 | 0 | 0 | 14 | 579 | 19 |
| South Africa | 0 | 0 | 0 | 0 | (s) | 0 | 0 | 1 | (s) | 77 | 0 | (s) | 79 | 3 |
| Saudi Arabia | 0 | 12 | 0 | 0 | 0 | 0 | 1 | 11 | 0 | 1 | 0 | (s) | 25 | 1 |

See footnotes at end of table.

## Table 22. Exports of Crude Oil and Petroleum Products by Destination, September 1988 (continued)
(Thousand Barrels)

| Destination | Crude Oil 1 | LPG | Finished Motor Gasoline | Jet Fuel | Dist. Fuel Oil | Residual Fuel Oil | Special Naphthas | Lubri-cants | Waxes | Petro-leum Coke | Asphalt | Other2 | Total | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Singapore | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 3 | (s) | (s) | (s) | 1 | 5 | (s) |
| Spain | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 265 | (s) | 131 | 397 | 13 |
| Sweden | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | (s) | 0 | 0 | 1 | 3 | (s) |
| Switzerland | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | (s) | 5 | (s) |
| Thailand | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | (s) | 0 | (s) | 1 | 5 | (s) |
| Trinidad and Tobago | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 0 | 0 | (s) | (s) | (s) |
| Turkey | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 132 | 0 | (s) | 139 | 5 |
| United Arab Emirates | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 2 | 0 | 57 | 0 | 1 | 59 | 2 |
| United Kingdom | 0 | 39 | 0 | 0 | 0 | 0 | 0 | 12 | (s) | 250 | 1 | 52 | 354 | 12 |
| U.S.S.R. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 125 | 0 | 0 | 1 | 0 | 126 | 4 |
| Uruguay | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 0 | 0 | 0 | (s) | (s) |
| Venezuela | 0 | 1 | 0 | 0 | 0 | 0 | (s) | 3 | (s) | (s) | 0 | 4 | 9 | (s) |
| Virgin Islands | 2,744 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 2,746 | 92 |
| Yugoslavia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 0 | 0 | 0 | (s) | (s) |
| Other | 0 | 4 | 0 | 0 | (s) | 0 | (s) | 14 | (s) | 177 | (s) | 1 | 198 | 7 |
| **Total** | **3,655** | **1,281** | **471** | **478** | **2,156** | **3,008** | **294** | **842** | **70** | **7,135** | **41** | **830** | **20,260** | **675** |

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[1] Crude oil exports are restricted to: 1) crude oil derived from fields under the State waters of Alaska's Cook Inlet; 2) certain domestically produced crude oil destined for Canada; and 3) shipments to U.S. territories.

[2] Includes pentanes plus, kerosene, naphtha less than 400 degrees F endpoint, other oils equal to or greater than 400 degrees F endpoint and miscellaneous products.

(s) = Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 23. Year-to-Date Exports of Crude Oil and Petroleum Products by Destination, January - September 1988
(Thousand Barrels)

| Destination | Crude Oil 1 | LPG | Finished Motor Gasoline | Jet Fuel | Dist. Fuel Oil | Residual Fuel Oil | Special Naphthas | Lubricants | Waxes | Petroleum Coke | Asphalt | Other2 | Total | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Argentina | 0 | 41 | 0 | 0 | 220 | 256 | 9 | 45 | 1 | 4 | (s) | 118 | 693 | 3 |
| Australia | 0 | 17 | 0 | 0 | 229 | 2,033 | 57 | 84 | 4 | 2,169 | 1 | 43 | 4,636 | 17 |
| Bahama Islands | 0 | 112 | 503 | 284 | 1,815 | 3,556 | 0 | 32 | (s) | 0 | (s) | 1 | 6,303 | 23 |
| Bahrain | 0 | 1 | 0 | 0 | (s) | 0 | (s) | (s) | 0 | 316 | 0 | 2 | 319 | 1 |
| Belgium & Luxembourg | 0 | 21 | (s) | 0 | 0 | 0 | 77 | 195 | 10 | 5,970 | (s) | 8 | 6,282 | 23 |
| Brazil | 0 | 52 | 43 | 0 | 263 | 0 | 25 | 142 | (s) | 303 | (s) | 5 | 834 | 3 |
| Cameroon | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 113 | 0 | 0 | 113 | (s) |
| Canada | 3,184 | 4,893 | 1,148 | 2,104 | 2,586 | 2,731 | 212 | 1,183 | 128 | 3,390 | 216 | 1,430 | 23,203 | 85 |
| Chile | 0 | 3 | 0 | 0 | 211 | 0 | 10 | 168 | 3 | (s) | (s) | 9 | 404 | 1 |
| China, Taiwan | 951 | 23 | 1 | 0 | 786 | 9,643 | 3 | 404 | 28 | 175 | 1 | 75 | 12,090 | 44 |
| Colombia | 0 | (s) | 126 | 0 | 0 | 0 | 8 | 59 | (s) | 2 | (s) | 16 | 211 | 1 |
| Costa Rica | 0 | (s) | 21 | 0 | (s) | 0 | 20 | 87 | (s) | 20 | (s) | 29 | 178 | 1 |
| Denmark | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 3 | (s) | 657 | 1 | 10 | 672 | 2 |
| Dominican Republic | 0 | 47 | 4 | 0 | 57 | 0 | 3 | 25 | (s) | (s) | 0 | 7 | 144 | 1 |
| Ecuador | 0 | (s) | 52 | 10 | (s) | 0 | 3 | 101 | 1 | 0 | (s) | 8 | 176 | 1 |
| Egypt | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | (s) | 268 | (s) | 1 | 277 | 1 |
| El Salvador | 0 | 17 | 97 | 0 | 78 | 0 | 3 | 28 | (s) | (s) | 0 | 35 | 257 | 1 |
| Finland | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 174 | (s) | 1 | 185 | 1 |
| France | 0 | 3 | (s) | 0 | 0 | 107 | 1 | 26 | 47 | 2,452 | (s) | 762 | 3,399 | 12 |
| French Pacific Isl | 0 | 1 | 0 | 0 | 392 | 943 | (s) | 3 | 0 | 0 | 0 | 0 | 1,339 | 5 |
| Germany FD (W) | 0 | 19 | 2 | 0 | (s) | 0 | 16 | 158 | 29 | 540 | 8 | 81 | 854 | 3 |
| Ghana | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 1 | 0 | 278 | (s) | 1 | 281 | 1 |
| Greece | 0 | 6 | 0 | 0 | 0 | 0 | 2 | 8 | (s) | 1,135 | 0 | (s) | 1,152 | 4 |
| Guatemala | 0 | 728 | 790 | 71 | 1,275 | 0 | 11 | 84 | (s) | (s) | (s) | 13 | 2,972 | 11 |
| Guinea | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | (s) | 6 | (s) |
| Honduras | 0 | 60 | 25 | 20 | 70 | 45 | 4 | 28 | 3 | 0 | 0 | 11 | 265 | 1 |
| Hong Kong | 0 | 6 | 0 | 0 | 0 | 0 | 1 | 27 | 1 | (s) | (s) | 4 | 39 | (s) |
| India | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 111 | 1 | (s) | (s) | 37 | 153 | 1 |
| Indonesia | 0 | (s) | 0 | 0 | 0 | 0 | 4 | 26 | (s) | 194 | (s) | 1 | 226 | 1 |
| Iran | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Israel | 0 | 1 | 39 | 448 | 0 | 0 | 11 | 24 | (s) | 282 | 0 | 7 | 812 | 3 |
| Italy | 0 | 111 | 3 | 0 | 0 | 0 | 26 | 37 | 6 | 7,898 | (s) | 675 | 8,756 | 32 |
| Ivory Coast | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | (s) | 0 | (s) | (s) | 25 | (s) |
| Jamaica | 0 | 184 | 168 | 0 | 455 | 1,848 | 2 | 46 | 1 | (s) | 0 | 8 | 2,713 | 10 |
| Japan | 0 | 35 | 2,102 | 3,267 | 6,019 | 4,978 | 753 | 465 | 28 | 16,497 | (s) | 585 | 34,728 | 127 |
| Jordan | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | (s) | 10 | (s) |
| Korea, Republic of | 0 | 111 | 3 | 0 | 242 | 3,076 | 46 | 285 | 4 | 881 | (s) | 830 | 5,477 | 20 |
| Kuwait | 0 | 1 | 0 | 0 | 0 | 0 | (s) | 11 | 0 | 0 | 0 | 2 | 14 | (s) |
| Lebanon | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 6 | (s) | 121 | 0 | (s) | 127 | (s) |
| Liberia | 0 | 0 | 0 | 0 | 0 | 21 | 0 | 1 | 0 | 0 | (s) | (s) | 21 | (s) |
| Malaysia | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 14 | 4 | 11 | (s) | 53 | 82 | (s) |
| Mexico | 0 | 4,177 | 24 | 18 | 1 | 10,725 | 45 | 823 | 122 | 681 | 1 | 131 | 16,749 | 61 |
| Netherlands | 0 | 44 | 19 | 0 | 0 | 0 | 211 | 86 | 6 | 7,018 | 1 | 359 | 7,744 | 28 |
| Netherlands Antilles | 0 | (s) | 9 | 2 | 79 | 4,835 | 1 | 15 | 0 | 0 | 0 | 4 | 4,945 | 18 |
| New Zealand | 0 | (s) | 0 | 0 | 0 | 0 | 9 | 12 | 1 | 396 | 1 | 12 | 431 | 2 |
| Nigeria | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 94 | 1 | 0 | (s) | (s) | 95 | (s) |
| Norway | 0 | 6 | 0 | 0 | (s) | 0 | (s) | 5 | (s) | 953 | (s) | 1 | 966 | 4 |
| Pacific Trust Terr. | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | (s) | 7 | (s) |
| Panama | 0 | 20 | 363 | 0 | 1,028 | 1,083 | 9 | 256 | (s) | 0 | (s) | 14 | 2,774 | 10 |
| Peru | 0 | 22 | 45 | 900 | 2,611 | 0 | 1 | 76 | (s) | (s) | (s) | 4 | 3,659 | 13 |
| Philippines | 0 | 30 | 0 | 0 | 0 | 0 | 9 | 41 | 3 | 27 | (s) | 125 | 235 | 1 |
| Puerto Rico | 4,482 | 85 | 20 | 104 | 308 | 92 | 11 | 306 | 11 | 11 | (s) | 122 | 5,552 | 20 |
| South Africa | 0 | 2 | 0 | 0 | (s) | 0 | (s) | 7 | 1 | 336 | (s) | 15 | 361 | 1 |

See footnotes at end of table.

## Table 23. Year-to-Date Exports of Crude Oil and Petroleum Products by Destination, January - September 1988 (continued)
(Thousand Barrels)

| Destination | Crude Oil 1 | LPG | Finished Motor Gasoline | Jet Fuel | Dist. Fuel Oil | Residual Fuel Oil | Special Naphthas | Lubricants | Waxes | Petroleum Coke | Asphalt | Other2 | Total | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Saudi Arabia | 0 | 96 | 0 | 0 | 0 | 0 | 2 | 60 | (s) | 3 | (s) | 27 | 187 | 1 |
| Singapore | 0 | 5 | 0 | 0 | 326 | 4,513 | 11 | 46 | (s) | 30 | (s) | 155 | 5,086 | 19 |
| Spain | 0 | (s) | 0 | 0 | 202 | 3,103 | (s) | 35 | 19 | 5,605 | (s) | 573 | 9,539 | 35 |
| Surinam | 0 | 53 | 0 | 0 | 0 | 0 | (s) | 7 | 0 | 8 | 0 | 1 | 69 | (s) |
| Sweden | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 11 | 1 | 307 | 1 | 3 | 325 | 1 |
| Switzerland | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 10 | (s) | 0 | (s) | 3 | 15 | (s) |
| Thailand | 0 | 2 | 0 | 0 | 0 | 0 | 5 | 29 | 1 | 0 | (s) | 299 | 338 | 1 |
| Trinidad and Tobago | 0 | 7 | 0 | 0 | 80 | 0 | 108 | 2 | (s) | (s) | 0 | 4 | 200 | 1 |
| Turkey | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 33 | (s) | 1,174 | 0 | 2 | 1,210 | 4 |
| United Arab Emirates | 0 | (s) | 0 | 0 | 0 | 5 | (s) | 65 | 0 | 189 | (s) | 9 | 268 | 1 |
| United Kingdom | 0 | 83 | 55 | 0 | 4 | 204 | 1 | 54 | 4 | 1,315 | 7 | 397 | 2,124 | 8 |
| U.S.S.R. | 0 | 0 | 0 | 0 | 0 | 25 | 0 | 678 | 0 | 287 | 1 | 59 | 1,050 | 4 |
| Uruguay | 0 | (s) | 0 | 0 | 0 | 182 | 0 | 7 | (s) | 0 | 0 | 1 | 190 | 1 |
| Venezuela | 0 | 14 | 0 | 5 | (s) | 0 | 12 | 26 | 2 | 730 | (s) | 26 | 816 | 3 |
| Virgin Islands | 35,526 | 4 | 7 | 0 | 0 | 0 | 0 | 18 | 0 | 0 | 0 | 8 | 35,563 | 130 |
| Yugoslavia | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 1 | 0 | 269 | 1 | 2 | 272 | 1 |
| Other | 0 | 187 | 153 | 13 | 545 | 735 | 7 | 173 | 1 | 880 | 2 | 126 | 2,822 | 10 |
| **Total** | **44,143** | **11,339** | **5,820** | **7,244** | **19,885** | **54,739** | **1,755** | **6,957** | **473** | **64,070** | **247** | **7,348** | **224,020** | **818** |

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[1] Crude oil exports are restricted to: 1) crude oil derived from fields under the State waters of Alaska's Cook Inlet; 2) certain domestically produced crude oil destined for Canada; and 3) shipments to U.S. territories.

[2] Includes pentanes plus, kerosene, naphtha less than 400 degrees F endpoint, other oils equal to or greater than 400 degrees F endpoint and miscellaneous products.

(s) = Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures. See Explanatory Notes 1 and 2.

## Table 24. Stocks of Crude Oil and Petroleum Products by PAD District, September 30, 1988
(Thousand Barrels)

| Commodity | PAD District I | | | PAD District II | | | | PAD District III | | | | | | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | East Coast | Appalachian No.1 | Total | Ind., Ill., Ky. * | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast | |
| **Crude Oil (incl. lease condensate)** | | | | | | | | | | | | | | | | |
| Refinery | -- | -- | 13,555 | -- | -- | -- | 11,135 | -- | -- | -- | -- | -- | 51,053 | 1,736 | 24,762 | 102,241 |
| Tank Farms and Pipelines | -- | -- | 1,462 | -- | -- | -- | 51,886 | -- | -- | -- | -- | -- | 89,251 | 8,840 | 31,801 | 183,240 |
| Leases | -- | -- | 36 | -- | -- | -- | 1,373 | -- | -- | -- | -- | -- | 16,650 | 1,165 | 1,746 | 20,970 |
| Strategic Petroleum Reserve[1] | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | -- | -- | 554,659 | 0 | 0 | 554,659 |
| Alaskan In-Transit | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | -- | -- | 0 | 0 | 21,997 | 21,997 |
| Total | -- | -- | 15,053 | -- | -- | -- | 64,394 | -- | -- | -- | -- | -- | 711,613 | 11,741 | 80,306 | 883,107 |
| **Total Stocks, All Oils (excl. Crude Oil)** | | | | | | | | | | | | | | | | |
| Refinery | 42,092 | 2,979 | 45,071 | 37,256 | 6,829 | 16,035 | 60,120 | 10,669 | 77,800 | 46,552 | 5,302 | 1,128 | 141,451 | 10,882 | 69,627 | 327,151 |
| Bulk Terminal | -- | -- | 107,580 | -- | -- | -- | 76,875 | -- | -- | -- | -- | -- | 78,572 | 2,709 | 26,656 | 292,392 |
| Pipeline | -- | -- | 27,361 | -- | -- | -- | 35,398 | -- | -- | -- | -- | -- | 38,334 | 2,483 | 5,561 | 109,137 |
| Natural Gas Processing Plant | 161 | 39 | 200 | 296 | 44 | 2,612 | 2,952 | 1,230 | 8,310 | 2,392 | 142 | 82 | 12,156 | 153 | 172 | 15,633 |
| Total | -- | -- | 180,212 | -- | -- | -- | 175,345 | -- | -- | -- | -- | -- | 270,513 | 16,227 | 102,016 | 744,313 |
| **Pentanes Plus** | | | | | | | | | | | | | | | | |
| Refinery | 18 | 0 | 18 | 202 | 76 | 135 | 413 | 346 | 199 | 121 | 9 | 24 | 699 | 1 | 54 | 1,185 |
| Bulk Terminal | -- | -- | 17 | -- | -- | -- | 1,831 | -- | -- | -- | -- | -- | 2,798 | 0 | 33 | 4,679 |
| Pipeline | -- | -- | 0 | -- | -- | -- | 642 | -- | -- | -- | -- | -- | 1,099 | 83 | 0 | 1,824 |
| Natural Gas Processing Plant | 4 | 13 | 17 | 25 | 8 | 449 | 482 | 370 | 849 | 546 | 36 | 15 | 1,816 | 52 | 19 | 2,386 |
| Total | -- | -- | 52 | -- | -- | -- | 3,368 | -- | -- | -- | -- | -- | 6,412 | 136 | 106 | 10,074 |
| **Liquefied Petroleum Gases** | | | | | | | | | | | | | | | | |
| Refinery | 1,291 | 11 | 1,302 | 2,355 | 175 | 610 | 3,140 | 2,581 | 2,585 | 2,664 | 19 | 26 | 7,875 | 508 | 1,004 | 13,829 |
| Bulk Terminal | -- | -- | 2,409 | -- | -- | -- | 24,082 | -- | -- | -- | -- | -- | 49,623 | 123 | 2,878 | 79,115 |
| Pipeline | -- | -- | 1,959 | -- | -- | -- | 7,055 | -- | -- | -- | -- | -- | 6,019 | 429 | 0 | 15,462 |
| Natural Gas Processing Plant | 157 | 26 | 183 | 271 | 36 | 2,163 | 2,470 | 836 | 7,456 | 1,843 | 105 | 67 | 10,307 | 101 | 153 | 13,214 |
| Total | -- | -- | 5,853 | -- | -- | -- | 36,747 | -- | -- | -- | -- | -- | 73,824 | 1,161 | 4,035 | 121,620 |
| **Ethane** | | | | | | | | | | | | | | | | |
| Refinery | 21 | 0 | 21 | 1 | 0 | 0 | 1 | 113 | 305 | 0 | 0 | 0 | 418 | 0 | 0 | 440 |
| Bulk Terminal | -- | -- | 2 | -- | -- | -- | 2,930 | -- | -- | -- | -- | -- | 9,229 | 0 | 0 | 12,161 |
| Pipeline | -- | -- | 0 | -- | -- | -- | 1,244 | -- | -- | -- | -- | -- | 2,464 | 125 | 0 | 3,833 |
| Natural Gas Processing Plant | 0 | 0 | 0 | 17 | 0 | 358 | 375 | 94 | 1,728 | 123 | 8 | 4 | 1,957 | 3 | 0 | 2,335 |
| Total | -- | -- | 23 | -- | -- | -- | 4,550 | -- | -- | -- | -- | -- | 14,068 | 128 | 0 | 18,769 |

See footnotes at end of table.

## Table 24. Stocks of Crude Oil and Petroleum Products by PAD District, September 30, 1988 (continued)
(Thousand Barrels)

| Commodity | PAD District I | | | PAD District II | | | | PAD District III | | | | | | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | East Coast | Appala-chian No.1 | Total | Ind., Ill., Ky. * | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast | |
| **Propane** | | | | | | | | | | | | | | | | |
| Refinery | 1,013 | 1 | 1,014 | 1,606 | 28 | 166 | 1,800 | 1,407 | 1,289 | 1,153 | 4 | 5 | 3,858 | 161 | 169 | 7,002 |
| Bulk Terminal | -- | -- | 1,877 | -- | -- | -- | 15,342 | -- | -- | -- | -- | -- | 24,821 | 123 | 645 | 42,808 |
| Pipeline | -- | -- | 1,878 | -- | -- | -- | 3,877 | -- | -- | -- | -- | -- | 2,391 | 164 | 0 | 8,310 |
| Natural Gas Processing Plant | 112 | 19 | 131 | 173 | 29 | 945 | 1,147 | 451 | 1,886 | 124 | 42 | 45 | 2,548 | 57 | 137 | 4,020 |
| Total | -- | -- | 4,900 | -- | -- | -- | 22,166 | -- | -- | -- | -- | -- | 33,618 | 505 | 951 | 62,140 |
| **Normal Butane** | | | | | | | | | | | | | | | | |
| Refinery | 206 | 10 | 216 | 509 | 68 | 324 | 901 | 756 | 410 | 1,259 | 4 | 17 | 2,446 | 208 | 623 | 4,394 |
| Bulk Terminal | -- | -- | 529 | -- | -- | -- | 4,771 | -- | -- | -- | -- | -- | 11,682 | 0 | 1,483 | 18,465 |
| Pipeline | -- | -- | 81 | -- | -- | -- | 1,306 | -- | -- | -- | -- | -- | 739 | 91 | 0 | 2,217 |
| Natural Gas Processing Plant | 44 | 2 | 46 | 65 | 7 | 645 | 717 | 223 | 2,530 | 577 | 43 | 13 | 3,386 | 35 | 10 | 4,194 |
| Total | -- | -- | 872 | -- | -- | -- | 7,695 | -- | -- | -- | -- | -- | 18,253 | 334 | 2,116 | 29,270 |
| **Isobutane** | | | | | | | | | | | | | | | | |
| Refinery | 51 | 0 | 51 | 239 | 79 | 120 | 438 | 305 | 581 | 252 | 11 | 4 | 1,153 | 139 | 212 | 1,993 |
| Bulk Terminal | -- | -- | 1 | -- | -- | -- | 1,039 | -- | -- | -- | -- | -- | 3,891 | 0 | 750 | 5,681 |
| Pipeline | -- | -- | 0 | -- | -- | -- | 628 | -- | -- | -- | -- | -- | 425 | 49 | 0 | 1,102 |
| Natural Gas Processing Plant | 1 | 5 | 6 | 16 | 0 | 215 | 231 | 68 | 1,312 | 1,019 | 12 | 5 | 2,416 | 6 | 6 | 2,665 |
| Total | -- | -- | 58 | -- | -- | -- | 2,336 | -- | -- | -- | -- | -- | 7,885 | 194 | 968 | 11,441 |
| **Other Hydrocarbons and Alcohol** | | | | | | | | | | | | | | | | |
| Refinery | 6 | 0 | 6 | 159 | 4 | 29 | 192 | 0 | 48 | 68 | 0 | 4 | 120 | 48 | 15 | 381 |
| Total | -- | -- | 6 | -- | -- | -- | 192 | -- | -- | -- | -- | -- | 120 | 48 | 15 | 381 |
| **Unfinished Oils** | | | | | | | | | | | | | | | | |
| Refinery | | | | | | | | | | | | | | | | |
| Naphthas and Lighter | 3,536 | 162 | 3,698 | 2,996 | 155 | 1,052 | 4,203 | 666 | 7,997 | 4,908 | 231 | 32 | 13,834 | 651 | 5,240 | 27,626 |
| Kerosene and Light Gas Oils | 1,909 | 182 | 2,091 | 1,365 | 107 | 222 | 1,694 | 359 | 7,224 | 2,193 | 47 | 3 | 9,826 | 310 | 4,421 | 18,342 |
| Heavy Gas Oils | 6,495 | 247 | 6,742 | 3,121 | 283 | 2,209 | 5,613 | 759 | 8,045 | 6,843 | 388 | 155 | 16,190 | 689 | 14,598 | 43,832 |
| Residuum | 907 | 158 | 1,065 | 2,199 | 3 | 1,268 | 3,470 | 466 | 5,605 | 3,313 | 93 | 0 | 9,477 | 280 | 5,076 | 19,368 |
| Total | 12,847 | 749 | 13,596 | 9,681 | 548 | 4,751 | 14,980 | 2,250 | 28,871 | 17,257 | 759 | 190 | 49,327 | 1,930 | 29,335 | 109,168 |

See footnotes at end of table.

## Table 24. Stocks of Crude Oil and Petroleum Products by PAD District, September 30, 1988 (continued)
(Thousand Barrels)

| Commodity | PAD District I | | | PAD District II | | | | PAD District III | | | | | | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | East Coast | Appala-chian No.1 | Total | Ind., Ill., Ky. * | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast | |
| **Motor Gasoline Blending Components** | | | | | | | | | | | | | | | | |
| Refinery | 4,305 | 126 | 4,431 | 5,536 | 583 | 2,001 | 8,120 | 1,379 | 7,835 | 5,773 | 133 | 205 | 15,325 | 1,735 | 7,537 | 37,148 |
| Bulk Terminal | -- | -- | 188 | -- | -- | -- | 276 | -- | -- | -- | -- | -- | 811 | 39 | 20 | 1,334 |
| Pipeline | -- | -- | 0 | -- | -- | -- | 23 | -- | -- | -- | -- | -- | 0 | 0 | 144 | 167 |
| Total | -- | -- | 4,619 | -- | -- | -- | 8,419 | -- | -- | -- | -- | -- | 16,136 | 1,774 | 7,701 | 38,649 |
| **Aviation Gasoline Blending Components** | | | | | | | | | | | | | | | | |
| Refinery | 0 | 0 | 0 | 65 | 0 | 9 | 74 | 0 | 0 | 74 | 0 | 0 | 74 | 0 | 43 | 191 |
| Total | -- | -- | 0 | -- | -- | -- | 74 | -- | -- | -- | -- | -- | 74 | 0 | 43 | 191 |
| **Total Finished Motor Gasoline** | | | | | | | | | | | | | | | | |
| Refinery | 6,454 | 445 | 6,899 | 5,463 | 980 | 2,761 | 9,204 | 1,699 | 10,475 | 4,393 | 550 | 135 | 17,252 | 1,787 | 9,102 | 44,244 |
| Bulk Terminal | -- | -- | 34,839 | -- | -- | -- | 27,608 | -- | -- | -- | -- | -- | 9,822 | 1,518 | 12,274 | 86,061 |
| Pipeline | -- | -- | 14,291 | -- | -- | -- | 16,015 | -- | -- | -- | -- | -- | 17,871 | 1,065 | 2,398 | 51,640 |
| Total | -- | -- | 56,029 | -- | -- | -- | 52,827 | -- | -- | -- | -- | -- | 44,945 | 4,370 | 23,774 | 181,945 |
| **Finished Leaded Motor Gasoline** | | | | | | | | | | | | | | | | |
| Refinery | 624 | 132 | 756 | 1,035 | 269 | 907 | 2,211 | 534 | 1,807 | 743 | 139 | 53 | 3,276 | 828 | 2,449 | 9,520 |
| Bulk Terminal | -- | -- | 7,938 | -- | -- | -- | 7,667 | -- | -- | -- | -- | -- | 2,833 | 676 | 3,945 | 23,059 |
| Pipeline | -- | -- | 1,867 | -- | -- | -- | 3,539 | -- | -- | -- | -- | -- | 3,174 | 434 | 468 | 9,482 |
| Total | -- | -- | 10,561 | -- | -- | -- | 13,417 | -- | -- | -- | -- | -- | 9,283 | 1,938 | 6,862 | 42,061 |
| **Finished Unleaded Motor Gasoline** | | | | | | | | | | | | | | | | |
| Refinery | 5,830 | 313 | 6,143 | 4,428 | 711 | 1,854 | 6,993 | 1,165 | 8,668 | 3,650 | 411 | 82 | 13,976 | 959 | 6,653 | 34,724 |
| Bulk Terminal | -- | -- | 26,901 | -- | -- | -- | 19,941 | -- | -- | -- | -- | -- | 6,989 | 842 | 8,329 | 63,002 |
| Pipeline | -- | -- | 12,424 | -- | -- | -- | 12,476 | -- | -- | -- | -- | -- | 14,697 | 631 | 1,930 | 42,158 |
| Total | -- | -- | 45,468 | -- | -- | -- | 39,410 | -- | -- | -- | -- | -- | 35,662 | 2,432 | 16,912 | 139,884 |
| **Finished Aviation Gasoline** | | | | | | | | | | | | | | | | |
| Refinery | 49 | 0 | 49 | 114 | 20 | 13 | 147 | 84 | 312 | 139 | 0 | 0 | 535 | 32 | 224 | 987 |
| Bulk Terminal | -- | -- | 210 | -- | -- | -- | 321 | -- | -- | -- | -- | -- | 60 | 15 | 241 | 847 |
| Pipeline | -- | -- | 28 | -- | -- | -- | 36 | -- | -- | -- | -- | -- | 6 | 0 | 0 | 70 |
| Total | -- | -- | 287 | -- | -- | -- | 504 | -- | -- | -- | -- | -- | 601 | 47 | 465 | 1,904 |

See footnotes at end of table.

Table 24. Stocks of Crude Oil and Petroleum Products by PAD District, September 30, 1988 (continued)
(Thousand Barrels)

| Commodity | PAD District I | | | PAD District II | | | | PAD District III | | | | | | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | East Coast | Appalachian No.1 | Total | Ind., Ill., Ky. * | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast | |
| **Naphtha-Type Jet Fuel** | | | | | | | | | | | | | | | | |
| Refinery | 351 | 0 | 351 | 249 | 6 | 155 | 410 | 211 | 671 | 587 | 102 | 189 | 1,760 | 253 | 632 | 3,406 |
| Bulk Terminal | -- | -- | 674 | -- | -- | -- | 269 | -- | -- | -- | -- | -- | 105 | 6 | 543 | 1,597 |
| Pipeline | -- | -- | 113 | -- | -- | -- | 240 | -- | -- | -- | -- | -- | 376 | 128 | 632 | 1,489 |
| Total | -- | -- | 1,138 | -- | -- | -- | 919 | -- | -- | -- | -- | -- | 2,241 | 387 | 1,807 | 6,492 |
| **Kerosene-Type Jet Fuel** | | | | | | | | | | | | | | | | |
| Refinery | 1,548 | 15 | 1,563 | 1,484 | 209 | 489 | 2,182 | 409 | 3,667 | 2,767 | 35 | 66 | 6,944 | 451 | 4,001 | 15,141 |
| Bulk Terminal | -- | -- | 3,912 | -- | -- | -- | 3,458 | -- | -- | -- | -- | -- | 2,199 | 217 | 2,260 | 12,046 |
| Pipeline | -- | -- | 4,319 | -- | -- | -- | 2,840 | -- | -- | -- | -- | -- | 4,939 | 152 | 880 | 13,130 |
| Total | -- | -- | 9,794 | -- | -- | -- | 8,480 | -- | -- | -- | -- | -- | 14,082 | 820 | 7,141 | 40,317 |
| **Kerosene** | | | | | | | | | | | | | | | | |
| Refinery | 244 | 78 | 322 | 541 | 272 | 274 | 1,087 | 63 | 611 | 524 | 97 | 0 | 1,295 | 8 | 177 | 2,889 |
| Bulk Terminal | -- | -- | 2,359 | -- | -- | -- | 959 | -- | -- | -- | -- | -- | 489 | 23 | 38 | 3,868 |
| Pipeline | -- | -- | 252 | -- | -- | -- | 129 | -- | -- | -- | -- | -- | 330 | 0 | 0 | 711 |
| Total | -- | -- | 2,933 | -- | -- | -- | 2,175 | -- | -- | -- | -- | -- | 2,114 | 31 | 215 | 7,468 |
| **Distillate Fuel Oils** | | | | | | | | | | | | | | | | |
| Refinery | 9,150 | 526 | 9,676 | 4,599 | 1,145 | 2,991 | 8,735 | 695 | 9,892 | 3,812 | 1,553 | 80 | 16,032 | 1,391 | 6,316 | 42,150 |
| Bulk Terminal | -- | -- | 40,734 | -- | -- | -- | 13,250 | -- | -- | -- | -- | -- | 5,273 | 725 | 4,658 | 64,640 |
| Pipeline | -- | -- | 6,399 | -- | -- | -- | 8,402 | -- | -- | -- | -- | -- | 7,421 | 626 | 1,331 | 24,179 |
| Natural Gas Processing Plant | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 2 | 0 | 0 | 7 | 0 | 0 | 7 |
| Total | -- | -- | 56,809 | -- | -- | -- | 30,387 | -- | -- | -- | -- | -- | 28,733 | 2,742 | 12,305 | 130,976 |
| **Residual Fuel Oils** | | | | | | | | | | | | | | | | |
| Refinery | 2,484 | 65 | 2,549 | 1,955 | 223 | 169 | 2,347 | 268 | 3,399 | 3,361 | 130 | 17 | 7,175 | 547 | 5,967 | 18,585 |
| Bulk Terminal | -- | -- | 16,732 | -- | -- | -- | 1,054 | -- | -- | -- | -- | -- | 4,793 | 0 | 2,952 | 25,531 |
| Pipeline | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | -- | -- | 0 | 0 | 104 | 104 |
| Total | -- | -- | 19,281 | -- | -- | -- | 3,401 | -- | -- | -- | -- | -- | 11,968 | 547 | 9,023 | 44,220 |
| **Naphtha < 400 Deg. Petro. Feed. Use** | | | | | | | | | | | | | | | | |
| Refinery | 415 | 0 | 415 | 326 | 0 | 78 | 404 | 52 | 902 | 281 | 41 | 12 | 1,288 | 13 | 156 | 2,276 |
| Total | 415 | 0 | 415 | 326 | 0 | 78 | 404 | 52 | 902 | 281 | 41 | 12 | 1,288 | 13 | 156 | 2,276 |
| **Other Oils > 400 Deg. Petro. Feed. Use** | | | | | | | | | | | | | | | | |
| Refinery | 5 | 0 | 5 | 2 | 0 | 0 | 2 | 126 | 1,182 | 95 | 0 | 0 | 1,403 | 4 | 232 | 1,646 |
| Total | 5 | 0 | 5 | 2 | 0 | 0 | 2 | 126 | 1,182 | 95 | 0 | 0 | 1,403 | 4 | 232 | 1,646 |

See footnotes at end of table.

## Table 24. Stocks of Crude Oil and Petroleum Products by PAD District, September 30, 1988 (continued)
(Thousand Barrels)

| Commodity | PAD District I | | | PAD District II | | | | PAD District III | | | | | | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | East Coast | Appalachian No.1 | Total | Ind., Ill., Ky. * | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast | |
| **Special Naphthas** | | | | | | | | | | | | | | | | |
| Refinery | 455 | 35 | 490 | 178 | 0 | 73 | 251 | 92 | 1,153 | 30 | 196 | 0 | 1,471 | 12 | 120 | 2,344 |
| Bulk Terminal | -- | -- | 422 | -- | -- | -- | 436 | -- | -- | -- | -- | -- | 108 | 0 | 17 | 983 |
| Total | -- | -- | 912 | -- | -- | -- | 687 | -- | -- | -- | -- | -- | 1,579 | 12 | 137 | 3,327 |
| **Lubricants** | | | | | | | | | | | | | | | | |
| Refinery | 282 | 747 | 1,029 | 967 | 0 | 336 | 1,303 | 31 | 3,735 | 1,346 | 496 | 0 | 5,608 | 96 | 1,120 | 9,156 |
| Bulk Terminal | -- | -- | 1,596 | -- | -- | -- | 648 | -- | -- | -- | -- | -- | 601 | 1 | 513 | 3,359 |
| Total | -- | -- | 2,625 | -- | -- | -- | 1,951 | -- | -- | -- | -- | -- | 6,209 | 97 | 1,633 | 12,515 |
| **Waxes** | | | | | | | | | | | | | | | | |
| Refinery | 0 | 62 | 62 | 91 | 0 | 42 | 133 | 70 | 231 | 141 | 13 | 0 | 455 | 62 | 117 | 829 |
| Total | -- | -- | 62 | -- | -- | -- | 133 | -- | -- | -- | -- | -- | 455 | 62 | 117 | 829 |
| **Petroleum Coke** | | | | | | | | | | | | | | | | |
| Refinery | 653 | 0 | 653 | 168 | 1,109 | 222 | 1,499 | 12 | 859 | 2,049 | 252 | 0 | 3,172 | 9 | 1,804 | 7,137 |
| Total | 653 | 0 | 653 | 168 | 1,109 | 222 | 1,499 | 12 | 859 | 2,049 | 252 | 0 | 3,172 | 9 | 1,804 | 7,137 |
| **Asphalt and Road Oil** | | | | | | | | | | | | | | | | |
| Refinery | 1,440 | 84 | 1,524 | 2,969 | 1,458 | 886 | 5,313 | 260 | 821 | 867 | 917 | 180 | 3,045 | 1,931 | 1,384 | 13,197 |
| Bulk Terminal | -- | -- | 2,941 | -- | -- | -- | 2,593 | -- | -- | -- | -- | -- | 672 | 42 | 196 | 6,444 |
| Total | -- | -- | 4,465 | -- | -- | -- | 7,906 | -- | -- | -- | -- | -- | 3,717 | 1,973 | 1,580 | 19,641 |
| **Miscellaneous Products** | | | | | | | | | | | | | | | | |
| Refinery | 95 | 36 | 131 | 152 | 21 | 11 | 184 | 41 | 352 | 203 | 0 | 0 | 596 | 64 | 287 | 1,262 |
| Bulk Terminal | -- | -- | 547 | -- | -- | -- | 90 | -- | -- | -- | -- | -- | 1,218 | 0 | 33 | 1,888 |
| Pipeline | -- | -- | 0 | -- | -- | -- | 16 | -- | -- | -- | -- | -- | 273 | 0 | 72 | 361 |
| Natural Gas Processing Plant | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 0 | 1 | 1 | 0 | 26 | 0 | 0 | 26 |
| Total | -- | -- | 678 | -- | -- | -- | 290 | -- | -- | -- | -- | -- | 2,113 | 64 | 392 | 3,537 |
| **Total Stocks, All Oils** | -- | -- | **195,265** | -- | -- | -- | **239,739** | -- | -- | -- | -- | -- | **982,126** | **27,968** | **182,322** | **1,627,420** |

[1] Includes 38,395 thousand barrels of domestic crude oil.

* Effective January 1987 "Appalachian No.2" is combined with "Ind., Ill., Ky.".

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 25. Refinery and Bulk Terminal Stocks of Selected Petroleum Products by State, September 30, 1988
(Thousand Barrels)

| State | Leaded Motor Gasoline | Unleaded Motor Gasoline | Kerosene | Distillate Fuel Oil | Residual Fuel Oil |
|---|---|---|---|---|---|
| **PAD District I Total** | **8,694** | **33,044** | **2,681** | **50,410** | **19,281** |
| Connecticut | 464 | 1,049 | 232 | 4,393 | 324 |
| Delaware, D.C., Maryland | 313 | 1,849 | 182 | 3,678 | 1,809 |
| Florida | 1,342 | 4,900 | 136 | 1,793 | 1,015 |
| Georgia | 824 | 2,063 | 92 | 1,154 | 352 |
| Maine, New Hampshire, Vermont | 212 | 875 | 224 | 2,270 | 1,046 |
| Massachusetts | 203 | 1,678 | 18 | 3,527 | 1,152 |
| New Jersey | 1,117 | 6,230 | 84 | 15,684 | 6,036 |
| New York | 1,415 | 3,353 | 399 | 6,570 | 2,725 |
| North Carolina | 804 | 1,845 | 352 | 1,744 | 362 |
| Pennsylvania | 717 | 4,121 | 551 | 5,086 | 1,129 |
| Rhode Island | 137 | 975 | w | 1,258 | w |
| South Carolina | 448 | 1,309 | 218 | 826 | w |
| Virginia | 624 | 2,578 | 167 | 2,317 | 664 |
| West Virginia | 74 | 219 | w | 110 | w |
| **PAD District II Total** | **9,878** | **26,934** | **2,046** | **21,985** | **3,401** |
| Illinois | 1,981 | 5,382 | 360 | 4,397 | 1,269 |
| Indiana | 1,347 | 3,521 | 172 | 2,398 | 643 |
| Iowa | 396 | 1,036 | w | 1,017 | w |
| Kansas, Nebraska | 1,008 | 1,962 | 13 | 2,259 | 78 |
| Kentucky | 432 | 1,091 | 82 | 647 | w |
| Michigan | 779 | 3,334 | 215 | 2,045 | 148 |
| Minnesota | 563 | 979 | w | 1,931 | 89 |
| Missouri | 450 | 946 | w | 672 | w |
| North Dakota, South Dakota | 208 | 448 | w | 638 | w |
| Ohio | 746 | 3,647 | 593 | 1,849 | 229 |
| Oklahoma | 820 | 1,337 | w | 1,883 | 202 |
| Tennessee | 580 | 1,826 | 51 | 795 | 236 |
| Wisconsin | 568 | 1,425 | w | 1,454 | 189 |
| **PAD District III Total** | **6,109** | **20,965** | **1,784** | **21,305** | **11,968** |
| Alabama | 447 | 1,139 | 117 | 942 | 1,021 |
| Arkansas | 116 | 380 | w | 198 | w |
| Louisiana | 1,006 | 3,882 | 705 | 4,035 | 5,308 |
| Mississippi | 512 | 1,503 | 35 | 2,284 | w |
| New Mexico | 165 | 288 | w | 200 | 17 |
| Texas | 3,863 | 13,773 | 919 | 13,646 | 5,365 |
| **PAD District IV Total** | **1,504** | **1,801** | **31** | **2,116** | **547** |
| Colorado | 269 | 529 | w | 391 | w |
| Idaho | 166 | 194 | w | 181 | w |
| Montana | 495 | 466 | w | 612 | 82 |
| Utah | 259 | 238 | w | 223 | 140 |
| Wyoming | 315 | 374 | w | 709 | w |
| **PAD District V Total** | **6,394** | **14,982** | **215** | **10,974** | **8,919** |
| Alaska | 295 | 506 | w | 863 | w |
| Arizona | 264 | 578 | w | 264 | w |
| California | 3,621 | 10,230 | 117 | 6,462 | 5,642 |
| Hawaii | 47 | 527 | w | 429 | w |
| Nevada | 117 | 257 | w | 136 | w |
| Oregon | 887 | 901 | w | 749 | 368 |
| Washington | 1,163 | 1,983 | w | 2,071 | 1,261 |
| **U.S. Total** | **32,579** | **97,726** | **6,757** | **106,790** | **44,116** |

w = Withheld to avoid disclosure of individual company data.
Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 26. Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, and Barge Between PAD Districts, September 1988
(Thousand Barrels)

| Commodity | From I to | | | From II to | | | | From III to | | | | From IV to | | | From V to | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | II | III | V | I | III | IV | V | I | II | IV | V | II | III | V | I | II | III | IV |
| **Crude Oil** | **0** | **0** | **0** | **117** | **2,484** | **617** | **0** | **67** | **43,606** | **0** | **0** | **4,695** | **2,337** | **0** | **1,776** | **0** | **12,653** | **0** |
| **Petroleum Products** | **7,166** | **339** | **0** | **3,554** | **6,585** | **1,974** | **0** | **72,591** | **29,733** | **0** | **1,973** | **1,347** | **1,578** | **1,223** | **0** | **0** | **0** | **0** |
| Pentanes Plus | 0 | 0 | 0 | 0 | 208 | 0 | 0 | 0 | 742 | 0 | 0 | 70 | 83 | 0 | 0 | 0 | 0 | 0 |
| Liquefied Petroleum Gases | 0 | 0 | 0 | 475 | 3,691 | 81 | 0 | 2,039 | 5,205 | | 0 | 534 | 1,495 | 0 | 0 | 0 | 0 | 0 |
| Unfinished Oils | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 144 | 267 | | 140 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Blending Components | | | | | | | | | | | | | | | | | | |
| Motor Gasoline | 50 | 49 | 0 | 132 | 45 | 0 | 0 | 0 | 199 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Aviation Gasoline | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Finished Motor Gasoline | 4,837 | 0 | 0 | 1,713 | 1,451 | 1,117 | 0 | 41,735 | 14,513 | 0 | 1,123 | 434 | 0 | 772 | 0 | 0 | 0 | 0 |
| Finished Leaded Motor Gasoline | 799 | 0 | 0 | 124 | 339 | 244 | 0 | 5,630 | 2,346 | 0 | 237 | 114 | 0 | 382 | 0 | 0 | 0 | 0 |
| Finished Unleaded Motor Gasoline | 4,038 | 0 | 0 | 1,589 | 1,112 | 873 | 0 | 36,105 | 12,167 | 0 | 886 | 320 | 0 | 390 | 0 | 0 | 0 | 0 |
| Finished Aviation Gasoline | 0 | 0 | 0 | 0 | 35 | 14 | 0 | 95 | 124 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Naphtha-Type Jet Fuel | 0 | 0 | 0 | 0 | 55 | 0 | 0 | 506 | 1 | 0 | 178 | 49 | 0 | 109 | 0 | 0 | 0 | 0 |
| Kerosene-Type Jet Fuel | 280 | 0 | 0 | 207 | 147 | 550 | 0 | 9,664 | 3,390 | 0 | 130 | 2 | 0 | 84 | 0 | 0 | 0 | 0 |
| Kerosene | 28 | 0 | 0 | 102 | 134 | 0 | 0 | 153 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Distillate Fuel Oil | 1,891 | 0 | 0 | 528 | 446 | 212 | 0 | 15,990 | 4,327 | 0 | 378 | 258 | 0 | 258 | 0 | 0 | 0 | 0 |
| Residual Fuel Oil | 0 | 0 | 0 | 12 | 356 | 0 | 0 | 584 | 35 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Petrochemical Feedstocks[1] | 72 | 0 | 0 | 44 | 0 | 0 | 0 | 39 | 164 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Special Naphthas | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 111 | 108 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lubricants | 8 | 78 | 0 | 104 | 17 | 0 | 0 | 1,123 | 329 | 0 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Waxes | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Asphalt and Road Oil | 0 | 184 | 0 | 229 | 0 | 0 | 0 | 304 | 279 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Miscellaneous Products | 0 | 26 | 0 | 8 | 0 | 0 | 0 | 102 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | **7,166** | **339** | **0** | **3,671** | **9,069** | **2,591** | **0** | **72,658** | **73,339** | **0** | **1,973** | **6,042** | **3,915** | **1,223** | **1,776** | **0** | **12,653** | **0** |

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[1] Includes naphtha less than 400 degrees F endpoint and other oils equal to or greater than 400 degrees F endpoint.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 27. Movements of Crude Oil and Petroleum Products by Pipeline Between PAD Districts, September 1988
(Thousand Barrels)

| Commodity | From I to | | From II to | | | From III to | | | | From IV to | | | From V to | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | II | III | I | III | IV | I | II | IV | V | II | III | V | III | IV |
| **Crude Oil** | 0 | 0 | 0 | 2,484 | 617 | 0 | 43,606 | 0 | 0 | 4,695 | 2,337 | 0 | 3,170 | 0 |
| **Petroleum Products** | 6,999 | 0 | 1,639 | 6,123 | 1,974 | 59,377 | 25,225 | 0 | 1,585 | 1,347 | 1,578 | 1,223 | 0 | 0 |
| Pentanes Plus | 0 | 0 | 0 | 208 | 0 | 0 | 742 | 0 | 0 | 70 | 83 | 0 | 0 | 0 |
| Liquefied Petroleum Gases | 0 | 0 | 475 | 3,682 | 81 | 1,836 | 5,205 | 0 | 0 | 534 | 1,495 | 0 | 0 | 0 |
| Blending Components | | | | | | | | | | | | | | |
| Motor Gasoline | 0 | 0 | 132 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Aviation Gasoline | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Finished Motor Gasoline | 4,837 | 0 | 764 | 1,451 | 1,117 | 34,737 | 12,715 | 0 | 899 | 434 | 0 | 772 | 0 | 0 |
| Finished Leaded Motor Gasoline | 799 | 0 | 70 | 339 | 244 | 4,155 | 2,068 | 0 | 237 | 114 | 0 | 382 | 0 | 0 |
| Finished Unleaded Motor Gasoline | 4,038 | 0 | 694 | 1,112 | 873 | 30,582 | 10,647 | 0 | 662 | 320 | 0 | 390 | 0 | 0 |
| Finished Aviation Gasoline | 0 | 0 | 0 | 0 | 14 | 20 | 92 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Naphtha-Type Jet Fuel | 0 | 0 | 0 | 55 | 0 | 166 | 1 | 0 | 178 | 49 | 0 | 109 | 0 | 0 |
| Kerosene-Type Jet Fuel | 280 | 0 | 135 | 147 | 550 | 8,028 | 3,103 | 0 | 130 | 2 | 0 | 84 | 0 | 0 |
| Kerosene | 28 | 0 | 0 | 134 | 0 | 129 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Distillate Fuel Oil | 1,854 | 0 | 133 | 446 | 212 | 14,461 | 3,367 | 0 | 378 | 258 | 0 | 258 | 0 | 0 |
| Residual Fuel Oil | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Miscellaneous Products | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | 6,999 | 0 | 1,639 | 8,607 | 2,591 | 59,377 | 68,831 | 0 | 1,585 | 6,042 | 3,915 | 1,223 | 3,170 | 0 |

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 28. Movements of Crude Oil and Petroleum Products by Tanker and Barge Between PAD Districts, September 1988
(Thousand Barrels)

| Commodity | From I to | | | From II to | | | From III to | | | | | | From V to | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | II | III | V | I | III | V | I | New England | Central Atlantic | Lower Atlantic | II | V | I | II | III |
| **Crude Oil** | 0 | 0 | 0 | 117 | 0 | 0 | 67 | 0 | 67 | 0 | 0 | 0 | 1,776 | 0 | 9,483 |
| **Petroleum Products** | 167 | 339 | 0 | 1,915 | 462 | 0 | 13,214 | 58 | 1,419 | 11,737 | 4,508 | 388 | 0 | 0 | 0 |
| Liquefied Petroleum Gases | 0 | 0 | 0 | 0 | 9 | 0 | 203 | 0 | 0 | 203 | 0 | 0 | 0 | 0 | 0 |
| Unfinished Oils | 0 | 0 | 0 | 0 | 0 | 0 | 144 | 0 | 19 | 125 | 267 | 140 | 0 | 0 | 0 |
| Motor Gasoline Blending Components | 50 | 49 | 0 | 0 | 45 | 0 | 0 | 0 | 0 | 0 | 199 | 0 | 0 | 0 | 0 |
| Finished Motor Gasoline | 0 | 0 | 0 | 949 | 0 | 0 | 6,998 | 0 | 199 | 6,799 | 1,798 | 224 | 0 | 0 | 0 |
| Finished Leaded Motor Gasoline | 0 | 0 | 0 | 54 | 0 | 0 | 1,475 | 0 | 0 | 1,475 | 278 | 0 | 0 | 0 | 0 |
| Finished Unleaded Motor Gasoline | 0 | 0 | 0 | 895 | 0 | 0 | 5,523 | 0 | 199 | 5,324 | 1,520 | 224 | 0 | 0 | 0 |
| Finished Aviation Gasoline | 0 | 0 | 0 | 0 | 35 | 0 | 75 | 15 | 23 | 37 | 32 | 0 | 0 | 0 | 0 |
| Naphtha-Type Jet Fuel | 0 | 0 | 0 | 0 | 0 | 0 | 340 | 0 | 0 | 340 | 0 | 0 | 0 | 0 | 0 |
| Kerosene-Type Jet Fuel | 0 | 0 | 0 | 72 | 0 | 0 | 1,636 | 43 | 67 | 1,526 | 287 | 0 | 0 | 0 | 0 |
| Kerosene | 0 | 0 | 0 | 102 | 0 | 0 | 24 | 0 | 24 | 0 | 50 | 0 | 0 | 0 | 0 |
| Distillate Fuel Oil | 37 | 0 | 0 | 395 | 0 | 0 | 1,529 | 0 | 283 | 1,246 | 960 | 0 | 0 | 0 | 0 |
| Residual Fuel Oil | 0 | 0 | 0 | 12 | 356 | 0 | 584 | 0 | 352 | 232 | 35 | 0 | 0 | 0 | 0 |
| Petrochemical Feedstocks[1] | 72 | 0 | 0 | 44 | 0 | 0 | 39 | 0 | 30 | 9 | 164 | 0 | 0 | 0 | 0 |
| Special Naphthas | 0 | 2 | 0 | 0 | 0 | 0 | 111 | 0 | 27 | 84 | 108 | 0 | 0 | 0 | 0 |
| Lubricants | 8 | 78 | 0 | 104 | 17 | 0 | 1,123 | 0 | 302 | 821 | 329 | 24 | 0 | 0 | 0 |
| Waxes | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| Asphalt and Road Oil | 0 | 184 | 0 | 229 | 0 | 0 | 304 | 0 | 7 | 297 | 279 | 0 | 0 | 0 | 0 |
| Miscellaneous Products | 0 | 26 | 0 | 8 | 0 | 0 | 102 | 0 | 84 | 18 | 0 | 0 | 0 | 0 | 0 |
| **Total** | 167 | 339 | 0 | 2,032 | 462 | 0 | 13,281 | 58 | 1,486 | 11,737 | 4,508 | 388 | 1,776 | 0 | 9,483 |

[1] Includes naphtha less than 400 degrees F endpoint and other oils equal to or greater than 400 degrees F endpoint.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 29. Net Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, and Barge Between PAD Districts, September 1988

(Thousand Barrels)

| Commodity | PAD District I | | | PAD District II | | | PAD District III | | | PAD District IV | | | PAD District V | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Receipts into PADD I | Shipments from PADD I | Net Receipts PADD I | Receipts into PADD II | Shipments from PADD II | Net Receipts PADD II | Receipts into PADD III | Shipments from PADD III | Net Receipts PADD III | Receipts into PADD IV | Shipments from PADD IV | Net Receipts PADD IV | Receipts into PADD V | Shipments from PADD V | Net Receipts PADD V |
| **Crude Oil** | **1,960** | **0** | **1,960** | **48,301** | **3,218** | **45,083** | **17,474** | **43,673** | **-26,199** | **617** | **7,032** | **-6,415** | **0** | **14,429** | **-14,429** |
| **Petroleum Products** | **76,145** | **7,505** | **68,640** | **38,246** | **12,113** | **26,133** | **8,502** | **104,297** | **-95,795** | **1,974** | **4,148** | **-2,174** | **3,196** | **0** | **3,196** |
| Pentanes Plus | 0 | 0 | 0 | 812 | 208 | 604 | 291 | 742 | -451 | 0 | 153 | -153 | 0 | 0 | 0 |
| Liquefied Petroleum Gases | 2,514 | 0 | 2,514 | 5,739 | 4,247 | 1,492 | 5,186 | 7,244 | -2,058 | 81 | 2,029 | -1,948 | 0 | 0 | 0 |
| Unfinished Oils | 144 | 0 | 144 | 267 | 0 | 267 | 0 | 551 | -551 | 0 | 0 | 0 | 140 | 0 | 140 |
| Blending Components | | | | | | | | | | | | | | | |
| Motor Gasoline | 132 | 99 | 33 | 249 | 177 | 72 | 94 | 199 | -105 | 0 | 0 | 0 | 0 | 0 | 0 |
| Aviation Gasoline | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Finished Motor Gasoline | 43,448 | 4,837 | 38,611 | 19,784 | 4,281 | 15,503 | 1,451 | 57,371 | -55,920 | 1,117 | 1,206 | -89 | 1,895 | 0 | 1,895 |
| Finished Leaded Motor Gasoline | 5,754 | 799 | 4,955 | 3,259 | 707 | 2,552 | 339 | 8,213 | -7,874 | 244 | 496 | -252 | 619 | 0 | 619 |
| Finished Unleaded Motor Gasoline | 37,694 | 4,038 | 33,656 | 16,525 | 3,574 | 12,951 | 1,112 | 49,158 | -48,046 | 873 | 710 | 163 | 1,276 | 0 | 1,276 |
| Finished Aviation Gasoline | 95 | 0 | 95 | 124 | 49 | 75 | 35 | 219 | -184 | 14 | 0 | 14 | 0 | 0 | 0 |
| Naphtha-Type Jet Fuel | 506 | 0 | 506 | 50 | 55 | -5 | 55 | 685 | -630 | 0 | 158 | -158 | 287 | 0 | 287 |
| Kerosene-Type Jet Fuel | 9,871 | 280 | 9,591 | 3,672 | 904 | 2,768 | 147 | 13,184 | -13,037 | 550 | 86 | 464 | 214 | 0 | 214 |
| Kerosene | 255 | 28 | 227 | 78 | 236 | -158 | 134 | 203 | -69 | 0 | 0 | 0 | 0 | 0 | 0 |
| Distillate Fuel Oil | 16,518 | 1,891 | 14,627 | 6,476 | 1,186 | 5,290 | 446 | 20,695 | -20,249 | 212 | 516 | -304 | 636 | 0 | 636 |
| Residual Fuel Oil | 596 | 0 | 596 | 35 | 368 | -333 | 356 | 619 | -263 | 0 | 0 | 0 | 0 | 0 | 0 |
| Petrochemical Feedstocks[1] | 83 | 72 | 11 | 236 | 44 | 192 | 0 | 203 | -203 | 0 | 0 | 0 | 0 | 0 | 0 |
| Special Naphthas | 111 | 2 | 109 | 108 | 0 | 108 | 2 | 219 | -217 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lubricants | 1,227 | 86 | 1,141 | 337 | 121 | 216 | 95 | 1,476 | -1,381 | 0 | 0 | 0 | 24 | 0 | 24 |
| Waxes | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | -2 | 0 | 0 | 0 | 0 | 0 | 0 |
| Asphalt and Road Oil | 533 | 184 | 349 | 279 | 229 | 50 | 184 | 583 | -399 | 0 | 0 | 0 | 0 | 0 | 0 |
| Miscellaneous Products | 110 | 26 | 84 | 0 | 8 | -8 | 26 | 102 | -76 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | **78,105** | **7,505** | **70,600** | **86,547** | **15,331** | **71,216** | **25,976** | **147,970** | **-121,994** | **2,591** | **11,180** | **-8,589** | **3,196** | **14,429** | **-11,233** |

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[1] Includes naphtha less than 400 degrees F endpoint and other oils equal to or greater than 400 degrees F endpoint.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 30. Production of Residual Fuel Oil by Sulfur Content by PAD District, September, 1988
(Thousand Barrels)

| Commodity | PAD District I |  |  | PAD District II |  |  |  | PAD District III |  |  |  |  |  | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | East Coast | Appalachian No.1 | Total | Ind., Ill., Ky. * | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast |  |
| **Residual Fuel Oil** | **4,102** | **47** | **4,149** | **1,422** | **248** | **162** | **1,832** | **431** | **4,918** | **3,062** | **247** | **13** | **8,671** | **326** | **10,804** | **25,782** |
| 0.00 to 0.30% Sulfur | 757 | 16 | 773 | 46 | 0 | 0 | 46 | 61 | 26 | 699 | 55 | 5 | 846 | 79 | 992 | 2,736 |
| 0.31 to 1.00% Sulfur | 2,205 | 0 | 2,205 | 237 | 0 | 93 | 330 | 265 | 936 | 374 | 145 | 8 | 1,728 | 2 | 2,097 | 6,362 |
| Greater Than 1.00% Sulfur | 1,140 | 31 | 1,171 | 1,139 | 248 | 69 | 1,456 | 105 | 3,956 | 1,989 | 47 | 0 | 6,097 | 245 | 7,715 | 16,684 |

* Effective January 1987 "Appalachian No.2" is combined with "Ind., Ill., Ky.".
Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 31. Stocks of Residual Fuel Oil by Sulfur Content by PAD District, September 30, 1988
(Thousand Barrels)

| Commodity | PAD District I |  |  | PAD District II |  |  |  | PAD District III |  |  |  |  |  | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | East Coast | Appalachian No.1 | Total | Ind., Ill., Ky. * | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast |  |
| **Residual Fuel Oil -- 0.00 to 0.30% Sulfur** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 393 | 53 | 446 | 34 | 0 | 0 | 34 | 53 | 42 | 950 | 3 | 10 | 1,058 | 78 | 663 | 2,279 |
| Bulk Terminal | -- | -- | 4,195 | -- | -- | -- | 144 | -- | -- | -- | -- | -- | 18 | 0 | 0 | 4,357 |
| **Total** | -- | -- | **4,641** | -- | -- | -- | **178** | -- | -- | -- | -- | -- | **1,076** | **78** | **663** | **6,636** |
| **Residual Fuel Oil -- 0.31 to 1.00% Sulfur** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 1,226 | 0 | 1,226 | 307 | 0 | 64 | 371 | 59 | 611 | 160 | 94 | 7 | 931 | 91 | 1,014 | 3,633 |
| Bulk Terminal | -- | -- | 5,454 | -- | -- | -- | 344 | -- | -- | -- | -- | -- | 2,254 | 0 | 413 | 8,465 |
| **Total** | -- | -- | **6,680** | -- | -- | -- | **715** | -- | -- | -- | -- | -- | **3,185** | **91** | **1,427** | **12,098** |
| **Residual Fuel Oil -- Greater than 1.00% Sulfur** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 865 | 12 | 877 | 1,614 | 223 | 105 | 1,942 | 156 | 2,746 | 2,251 | 33 | 0 | 5,186 | 378 | 4,290 | 12,673 |
| Bulk Terminal | -- | -- | 7,083 | -- | -- | -- | 566 | -- | -- | -- | -- | -- | 2,521 | 0 | 2,539 | 12,709 |
| **Total** | -- | -- | **7,960** | -- | -- | -- | **2,508** | -- | -- | -- | -- | -- | **7,707** | **378** | **6,829** | **25,382** |

* Effective January 1987 "Appalachian No.2" is combined with "Ind., Ill., Ky.".
Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 32. Movements of Residual Fuel Oil by Tanker and Barge Between PAD Districts, by Sulfur Content, September1988
(Thousand Barrels)

| Commodity | From I to |  |  | From II to |  |  | From III to |  |  |  |  |  | From V to |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | II | III | V | I | III | V | I | New England | Central Atlantic | Lower Atlantic | II | V | I | II | III |
| **Residual Fuel Oil** | **0** | **0** | **0** | **12** | **356** | **0** | **584** | **0** | **352** | **232** | **35** | **0** | **0** | **0** | **0** |
| 0.00 to 0.30% Sulfur | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0.31 to 1.00% Sulfur | 0 | 0 | 0 | 0 | 0 | 0 | 203 | 0 | 0 | 203 | 0 | 0 | 0 | 0 | 0 |
| Greater Than 1.00% Sulfur | 0 | 0 | 0 | 12 | 356 | 0 | 381 | 0 | 352 | 29 | 35 | 0 | 0 | 0 | 0 |

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 33. Imports of Residual Fuel Oil by Sulfur Content by Country of Origin, September1988

(Thousand Barrels)

| Country | Residual Fuel Oil | | | |
|---|---|---|---|---|
| | 0.00 to 0.30% | 0.31 to 1.00% | Greater Than 1.00% | Total |
| **Arab OPEC** | | | | |
| Algeria | 1,682 | 0 | 0 | 1,682 |
| Iraq | 0 | 0 | 0 | 0 |
| Kuwait | 0 | 0 | 0 | 0 |
| Libya | 0 | 0 | 0 | 0 |
| Neutral Zone | 0 | 0 | 0 | 0 |
| Qatar | 0 | 0 | 0 | 0 |
| Saudi Arabia | 0 | 0 | 0 | 0 |
| United Arab Emirates | 0 | 0 | 0 | 0 |
| Subtotal Arab OPEC | 1,682 | 0 | 0 | 1,682 |
| **Other OPEC** | | | | |
| Ecuador | 0 | 0 | 181 | 181 |
| Gabon | 0 | 0 | 0 | 0 |
| Indonesia | 607 | 0 | 0 | 607 |
| Iran | 0 | 0 | 0 | 0 |
| Nigeria | 0 | 405 | 0 | 405 |
| Venezuela | 0 | 95 | 1,663 | 1,758 |
| Subtotal Other OPEC | 607 | 500 | 1,844 | 2,951 |
| **Other** | | | | |
| Angola | 356 | 0 | 0 | 356 |
| Australia | 0 | 226 | 0 | 226 |
| Bahama Islands | 0 | 85 | 675 | 760 |
| Bolivia | 0 | 0 | 0 | 0 |
| Brazil | 0 | 0 | 0 | 0 |
| Brunei | 0 | 0 | 0 | 0 |
| Canada | 49 | 132 | 935 | 1,116 |
| China, People's Republic of | 0 | 0 | 0 | 0 |
| Congo | 166 | 0 | 0 | 166 |
| Egypt | 0 | 0 | 0 | 0 |
| France | 0 | 280 | 0 | 280 |
| Ghana | 0 | 0 | 0 | 0 |
| Liberia | 0 | 0 | 0 | 0 |
| Malaysia | 0 | 0 | 0 | 0 |
| Mexico | 0 | 0 | 1,313 | 1,313 |
| Netherlands | 0 | 0 | 0 | 0 |
| Netherlands Antilles | 0 | 12 | 308 | 320 |
| Norway | 0 | 0 | 0 | 0 |
| Oman | 0 | 0 | 0 | 0 |
| Peru | 0 | 200 | 332 | 532 |
| Puerto Rico | 0 | 0 | 0 | 0 |
| Romania | 0 | 0 | 283 | 283 |
| Spain | 0 | 0 | 341 | 341 |
| Syria | 0 | 0 | 0 | 0 |
| Trinidad | 0 | 0 | 313 | 313 |
| Tunisia | 0 | 0 | 0 | 0 |
| United Kingdom | 0 | 359 | 422 | 781 |
| Virgin Islands | 252 | 43 | 2,168 | 2,463 |
| Yugoslavia | 0 | 0 | 0 | 0 |
| Zaire | 0 | 0 | 0 | 0 |
| Other Western Hemisphere | 0 | 0 | 763 | 763 |

See footnotes at end of table.

## Table 33. Imports of Residual Fuel Oil by Sulfur Content by Country of Origin, September1988 (Continued)
(Thousand Barrels)

| Country | Residual Fuel Oil | | | |
|---|---|---|---|---|
| | 0.00 to 0.30% | 0.31 to 1.00% | Greater Than 1.00% | Total |
| **Other** | | | | |
| Other Eastern Hemisphere | 0 | 1,471 | 859 | 2,330 |
| Subtotal Other | 823 | 2,808 | 8,712 | 12,343 |
| **Total Imports** | **3,112** | **3,308** | **10,556** | **16,976** |

Note: Total may not equal sum of components due to independent rounding.
Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 34. Imports of Residual Fuel Oil by Sulfur Content by State of Entry, September1988
(Thousand Barrels)

| State | Residual Fuel Oil | | | |
|---|---|---|---|---|
| | 0.00 to 0.30% | 0.31 to 1.00% | Greater Than 1.00% | Total |
| **PAD District I** | **3,112** | **3,048** | **9,998** | **16,158** |
| Delaware | 0 | 0 | 81 | 81 |
| Florida | 0 | 438 | 1,176 | 1,614 |
| Georgia | 0 | 0 | 98 | 98 |
| Maine | 0 | 0 | 577 | 577 |
| Maryland | 166 | 622 | 819 | 1,607 |
| Massachusetts | 0 | 532 | 1,483 | 2,015 |
| New Hampshire | 0 | 0 | 61 | 61 |
| New Jersey | 1,402 | 0 | 1,140 | 2,542 |
| New York | 1,497 | 463 | 2,536 | 4,496 |
| North Carolina | 0 | 0 | 500 | 500 |
| Pennsylvania | 47 | 411 | 346 | 804 |
| Rhode Island | 0 | 223 | 0 | 223 |
| South Carolina | 0 | 0 | 378 | 378 |
| Vermont | 0 | 0 | 5 | 5 |
| Virginia | 0 | 359 | 798 | 1,157 |
| **PAD District II** | **0** | **0** | **26** | **26** |
| North Dakota | 0 | 0 | 26 | 26 |
| **PAD District III** | **0** | **0** | **531** | **531** |
| Alabama | 0 | 0 | 531 | 531 |
| **PAD District IV** | **0** | **0** | **1** | **1** |
| Montana | 0 | 0 | 1 | 1 |
| **PAD District V** | **0** | **260** | **0** | **260** |
| California | 0 | 226 | 0 | 226 |
| Oregon | 0 | 34 | 0 | 34 |
| **All PAD Districts** | **3,112** | **3,308** | **10,556** | **16,976** |

Note: Total may not equal sum of components due to independent rounding.
Sources and estimation procedures: See Explanatory Notes 1 and 2.

# Appendix A

## District Descriptions and Maps

## Appendix A

# District Descriptions and Maps

The following are the Refining Districts which make up the Petroleum Administration for Defense (PAD) Districts.

## PAD District I

*East Coast:* District of Columbia and the States of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New Jersey, Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, Florida, and the following counties of the State of New York: Cayuga, Tompkins, Chemung, and all counties east and north thereof. Also the following counties in the State of Pennsylvania: Bradford, Sullivan, Columbia, Montour, Northumberland, Dauphin, York, and all counties east thereof.

*Appalachian No. 1:* The State of West Virginia and those parts of the States of Pennsylvania and New York not included in the East Coast District.

## PAD District II

*Indiana-Illinois-Kentucky*: The States of Indiana, Illinois, Kentucky, Tennessee, Michigan, and Ohio.

*Minnesota-Wisconsin-North and South Dakota:* The States of Minnesota, Wisconsin, North Dakota, and South Dakota.

*Oklahoma-Kansas-Missouri:* The States of Oklahoma, Kansas, Missouri, Nebraska, and Iowa.

## PAD District III

*Texas Inland:* The State of Texas except the Texas Gulf Coast District.

*Texas Gulf Coast:* The following counties of the State of Texas: Newton, Orange, Jefferson, Jasper, Tyler, Hardin, Liberty, Chambers, Polk, San Jacinto, Montgomery, Harris, Galveston, Waller, Fort Bend, Brazoria, Wharton, Matagorda, Jackson, Victoria, Calhoun, Refugio, Aransas, San Patricio, Nueces, Kleberg, Kenedy, Willacy, and Cameron.

*Louisiana Gulf Coast:* The following Parishes of the State of Louisiana: Vernon, Rapides, Avoyelles, Pointe Coupee, West Feliciana, East Feliciana, Saint Helena, Tangipahoa, Washington, and all Parishes south thereof. Also the following counties of the State of Mississippi: Pearl River, Stone, George, Hancock, Harrison, and Jackson. Also the following counties of the State of Alabama: Mobile and Baldwin.

*North Louisiana-Arkansas:* The State of Arkansas and those parts of the States of Louisiana, Mississippi, and Alabama not included in the Louisiana Gulf Coast District.

*New Mexico:* The State of New Mexico.

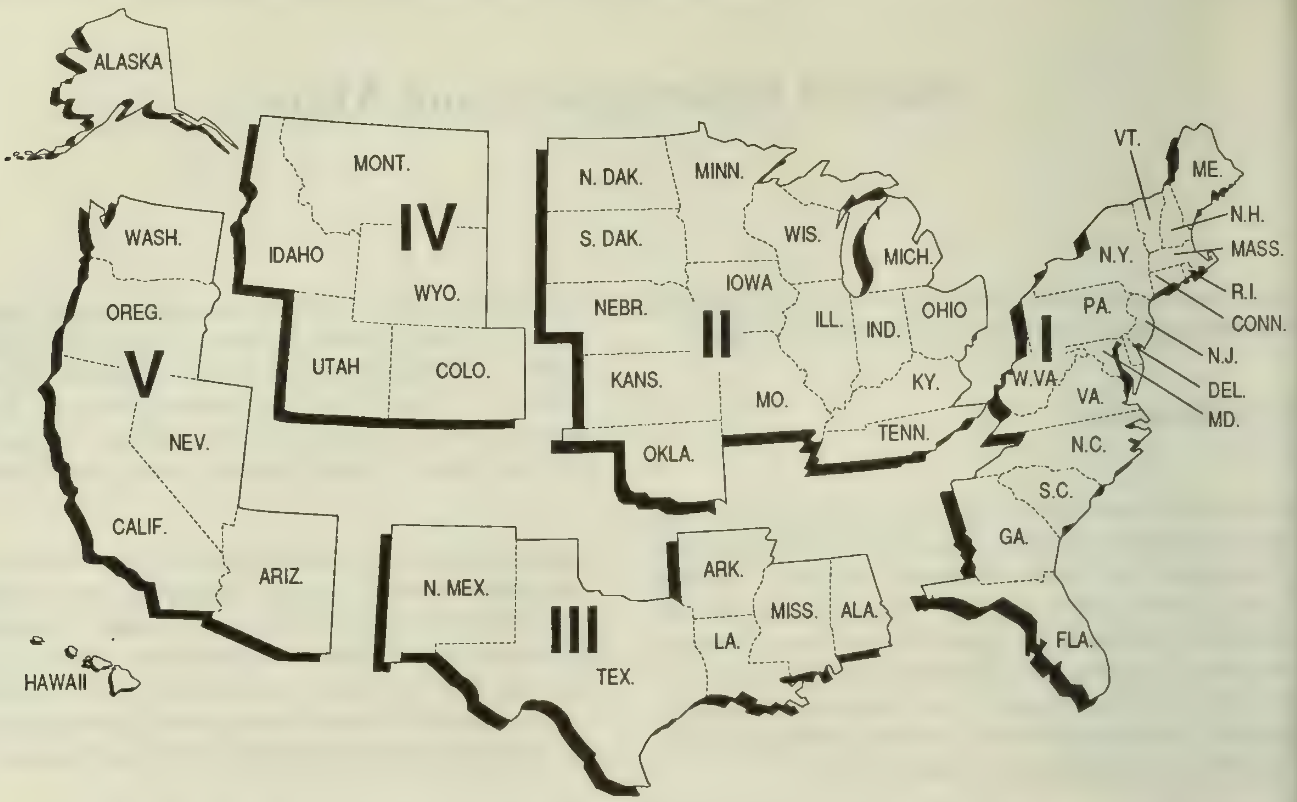
## PAD District IV

*Rocky Mountain:* The States of Montana, Idaho, Wyoming, Utah, and Colorado.

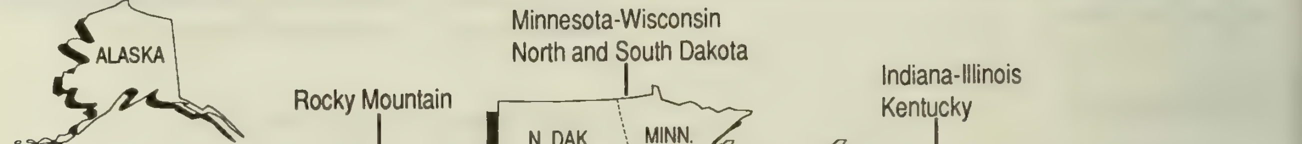
## PAD District V

*West Coast:* The States of Washington, Oregon, California, Nevada, Arizona, Alaska, and Hawaii.

## Petroleum Administration for Defense (PAD) Districts

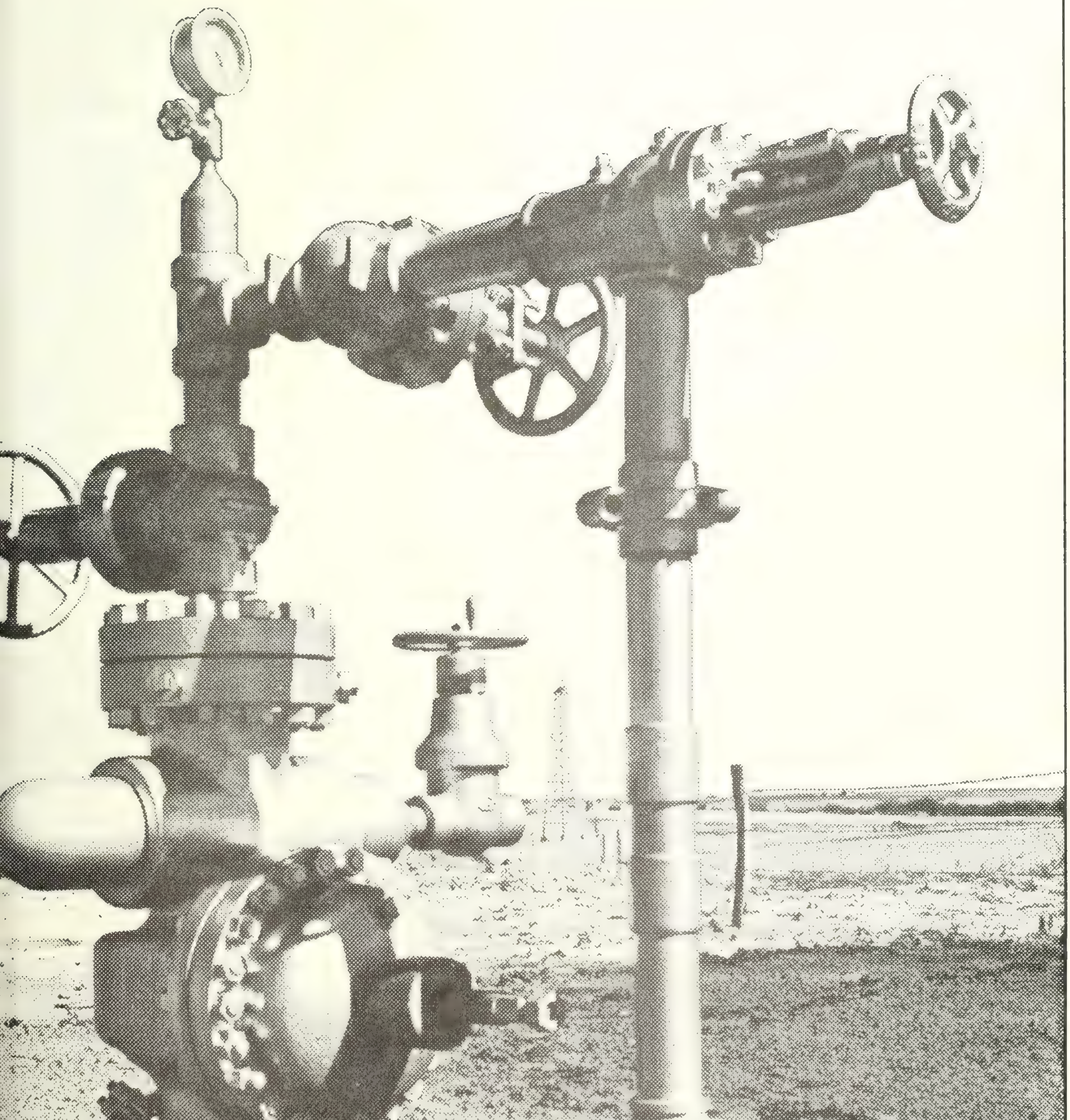


## Refining Districts



# Appendix B

## Explanatory Notes



## Appendix B

# Explanatory Notes

## Note 1: Data Collection Methodology

**Background**

The Petroleum Supply Reporting System (PSRS) represents a family of data collection survey forms, data processing systems and publication systems that have been consolidated to achieve comparability and consistency throughout. The survey forms that comprise the PSRS are:

| *Form Number* | *Name* |
|---|---|
| EIA-800 | Weekly Refinery Report |
| EIA-801 | Weekly Bulk Terminal Report |
| EIA-802 | Weekly Product Pipeline Report |
| EIA-803 | Weekly Crude Oil Stocks Report |
| EIA-804 | Weekly Imports Report |
| EIA-810 | Monthly Refinery Report |
| EIA-811 | Monthly Bulk Terminal Report |
| EIA-812 | Monthly Product Pipeline Report |
| EIA-813 | Monthly Crude Oil Report |
| EIA-814 | Monthly Imports Report |
| EIA-816 | Monthly Natural Gas Liquids Report |
| EIA-817 | Monthly Tanker and Barge Movement Report |
| EIA-820 | Annual Refinery Report |

Forms EIA-800 through 804 comprise the Weekly Petroleum Supply Reporting System (WPSRS). This system is designed to collect weekly data on basic refinery operations and on crude oil and major petroleum products stocks and imports. Data from the WPSRS are published in the *Weekly Petroleum Status Report* (WPSR) and are also used to calculate the preliminary statistics in the "Summary Statistics" section of the *Petroleum Supply Monthly* (PSM). A description of the WPSRS survey forms follows in Explanatory Note 1.1.

Forms EIA-810 through 814, 816, and 817 comprise the Monthly Petroleum Supply Reporting System (MPSRS). These surveys collect detailed refinery and natural gas plant operations data; refinery, bulk terminal, natural gas plant, and pipeline stocks data; crude oil and petroleum product imports data; and data on movements of petroleum products and crude oil between Petroleum Administration for Defense (PAD) Districts. These surveys are the primary source of data for the "Summary Statistics" and "Detailed Statistics" sections of the PSM. A description of MPSRS survey forms follows in Explanatory Note 1.2.

Data are also obtained on magnetic tape from the Bureau of the Census on a monthly basis. These tapes contain aggregated import and export statistics that are used in the preparation of the PSM. A description of the Census data follows in Explanatory Note 1.3.

## Note 1.1: Weekly Petroleum Supply Reporting System (WPSRS)

**Background**

The EIA first began publishing weekly petroleum supply statistics in April 1979 using data from an external source. Estimates from the EIA's weekly sample surveys (inaugurated in April 1979) replaced the estimates from the external source for all but the imports series in January 1980, and replaced the imports estimates in June 1980.

The weekly surveys collect data comparable to those collected on a monthly basis. Selected petroleum companies report weekly data to the EIA on crude oil and petroleum product stocks, refinery inputs and production, and crude oil and petroleum product imports. On Forms EIA-800 through EIA-803, companies report data on a custody basis. On the Form EIA-804, the importer of record reports all shipments entering the United States. Current weekly data and the most recent monthly data are used to estimate the totals that are published in the *Weekly Petroleum Status Report*.

**Sample Frame**

The sample of companies that report weekly is selected from the universe of companies that report on the comparable monthly surveys. Sampled companies report data only for facilities in the 50 States and District of Columbia.

The sample for each survey is taken from the following universe:

**EIA-800**: Based on the EIA-810 universe which includes all petroleum refineries and blending plants located in the 50 States, District of Columbia, Puerto Rico, the Virgin Islands, and Guam. The selected sample size is 151.

**EIA-801**: Based on the EIA-811 universe which includes every bulk terminal operating in the 50 States, the District of Columbia, Puerto Rico, and the Virgin Islands. A bulk terminal is primarily used for storage and/or marketing of petroleum products and has a total bulk storage capacity of 50,000 barrels or more, and/or receives petroleum products by tanker, barge, or pipeline. Bulk terminal facilities associated with a product pipeline are included. The selected sample size is 68.

**EIA-802**: Based on the EIA-812 universe which includes all product pipeline companies that carry petroleum products (including interstate, intrastate, and intracompany pipelines) in the 50 States and the District of Columbia. The selected sample size is 39.

**EIA-803**: Based on the EIA-813 universe which includes companies that carry or store 1,000 barrels or more of crude oil. Included in this survey are gathering and trunk pipeline companies (including interstate, intrastate, and intracompany pipelines), crude oil producers, terminal operators, storers of crude oil (except refineries), and companies transporting Alaskan crude oil by water in the 50 States and the District of Columbia. The selected sample size is 79.

**EIA-804**: Based on the EIA-814 universe which covers each company, including subsidiary or affiliated companies, that import crude oil, unfinished oils, and finished petroleum products into the United States and Puerto Rico. The selected sample size is 103.

### Sampling Method

The sampling procedure used for the weekly system is the cut-off method. In the cut-off method, companies are ranked from largest to smallest on the basis of the quantities reported during some previous period. Companies are chosen for the sample beginning with the largest and adding companies until the total sample covers about 90 percent of the total for each item and each geographic region for which weekly data are published.

### Collection Methods

Data are collected by mail, mailgram, telephone, Telex, and Telefax on a weekly basis. The report period begins and ends each Friday at 7 a.m. All canvassed firms must file reports by 5 p.m. on the following Monday.

### Estimation and Imputation

After company reports have been checked and entered into the weekly data base, weekly totals for given products are estimated by using the following formula.

The total reported by all companies for the most recent month, ($M_t$), is divided by the amount reported by the sample of companies for the most recent month, ($M_s$). The result is multiplied by the amount reported by the sample of companies for the current week, ($W_s$). The answer, $W_t$, is an estimate of the amount that would have been reported by all companies for the current week if all companies reported each week.

$$W_t = \frac{M_t}{M_s}\,(W_s)$$

This procedure is used to estimate total weekly refinery inputs and production.

To estimate stocks of finished products, the preceding procedure is followed separately for refineries, bulk terminals, and pipelines. Total estimates are formed by summing over establishment types.

Weekly imports data are highly variable on a company-by-company basis or a week-by-week basis. Therefore, an exponentially smoothed ratio has been developed. The estimate of weekly imports is the sum of the smoothed ratios multiplied by the weekly values and estimates for shipments from Puerto Rico. Imports of other oils includes an adjustment from Census data for selected products because of coverage differences between the monthly imports data and Census data.

Explicit imputation is done for companies which do not respond in a given week. The imputed values are exponentially smoothed means of recent reports from the specific company.

### Response Rate

The response rate for the published estimates is usually between 97 and 100 percent of the sampled respondents.

## Note 1.2: Monthly Petroleum Supply Reporting System (MPSRS)

### Background

The MPSRS was implemented in January 1983 as the result of an extensive effort to integrate the collection and processing of petroleum supply data that have been collected on other

survey forms for many years. The collection of monthly petroleum supply statistics began as early as 1918 when the Bureau of Mines (BOM) began collecting data on refinery operations and crude oil stocks and movements. The collection systems were further expanded to include natural gas plant liquids production and storage in 1925, imports of crude oil and petroleum products and storage and movement of petroleum products in 1959, and tanker and barge movements of crude oil and petroleum products in 1964. Since their inception, each survey has undergone numerous changes, but the MPSRS is the first effort to make them all consistent and comparable.

### Respondent Frame

**EIA-810**: All petroleum refineries and blending plants located in the 50 States, District of Columbia, Puerto Rico, the Virgin Islands, and Guam. Approximately 260 respondents report on the EIA-810.

**EIA-811**: Every bulk terminal operating in the 50 States, the District of Columbia, Puerto Rico, and the Virgin Islands. A bulk terminal is primarily used for storage and/or marketing of petroleum products and has a total bulk storage capacity of 50,000 barrels or more, and/or receives petroleum products by tanker, barge, or pipeline. Bulk terminal facilities associated with a product pipeline are included. Approximately 320 respondents report on the EIA-811.

**EIA-812**: All product pipeline companies that carry petroleum products (including interstate, intrastate, and intracompany pipelines) in the 50 States and the District of Columbia. Approximately 90 respondents report on the EIA-812.

**EIA-813**: All companies which carry or store 1,000 barrels or more of crude oil. Included in this survey are gathering and trunk pipeline companies (including interstate, intrastate, and intracompany pipelines), crude oil producers, terminal operators, storers of crude oil (except refineries), and companies transporting Alaskan crude oil by water in the 50 States and the District of Columbia. Approximately 180 respondents report on the EIA-813.

**EIA-814**: All companies, including subsidiary or affiliated companies, that import crude oil, unfinished oils, and finished petroleum products into the United States and Puerto Rico. Approximately 1,500 respondents report on the EIA-814.

**EIA-816**: All facilities that extract liquid hydrocarbons from a natural gas stream (natural gas processing plant) and/or separate a liquid hydrocarbon stream into its component products (fractionator). Approximately 1,050 respondents report on the EIA-816.

**EIA-817**: All companies that have custody of crude oil or petroleum products transported by tanker or barge between PAD Districts or between the Panama Canal and the United States. For purposes of this report, custody is defined as physical possession of crude oil or petroleum products on a company owned tanker or barge. Also, companies which lease vessels or contract for the movement of crude oil or petroleum products on a tanker or barge between PAD Districts or between the Panama Canal and the United States are considered to have custody. Approximately 50 respondents report on the EIA-817.

EIA utilizes a number of sources and methods to maintain the survey respondent lists. On a regular basis, survey managers review industry publications such as the *Oil and Gas Journal* and *Oil Daily* for information on facilities or companies starting up or closing down operations. These sources are augmented by articles in newspapers, letters from respondents indicating changes in status and information received from survey systems operated by other offices.

Every three years an extensive survey is conducted to completely refresh the frames. This involves consolidating information from every known source including State agencies, Federal agencies (e.g., EPA, Corps of Engineers, Census Bureau, etc.), and private industry directories. The effort also includes the evaluation of the impact of potential frame changes on the historical time series of data published from these respondents. The results of this frame study are usually implemented in January to provide a full year under the same frame.

### Collection Methods

The data for all of the MPSRS surveys are collected monthly. Completed forms are required to be postmarked by the 20th calendar day following the end of the report month, with the exception of the EIA-814 which is due 15 work days following the end of the report month. Telephone follow-up calls are made to nonrespondents prior to the publication deadline, for their data. An automated mailing list is maintained and is used to monitor receipt of the forms.

### Imputing Missing Data

Imputation is performed for companies that do not respond to EIA Forms 810-813 and 816. For such companies, previous monthly values are used for current values. The previous month's ending stocks value is used for both the current month's beginning stocks and the current month's ending stocks. Data for nonrespondents on the EIA-814 and 817 are not imputed.

### Response Rate

The response rate is generally 99 to 100 percent by the time the data are first published. Nonrespondents are contacted in

writing and reminded of their requirement to report. Companies that file late or fail to file are subject to criminal fines, civil penalties, and other sanctions as provided by Section 13(i) of the FEA Act.

## Note 1.3: Census Import (IM-145) and Export (EM-522 and EM-594) Data

### Background

Each month the EIA purchases magnetic tapes of aggregated import and export statistics from the Bureau of the Census. These data tapes are the only source of export statistics and are used to augment the import data collected by the EIA.

### Import Statistics (IM-145)

### Coverage

Census import statistics used in the PSM reflect both government and nongovernment imports of merchandise from foreign countries and U.S. possessions into the United States (the 50 States and the District of Columbia) without regard to whether or not a commercial transaction is involved. The following types of transactions are excluded from the statistics:

1. Merchandise in-transit through the United States, when documented with Customs as an in-transit movement.
2. U.S. merchandise that was held in foreign countries by the U.S. Armed Forces and is returned to the United States for the use of the Armed Forces.

### Source of Import Information

The official U.S. import statistics are compiled by the Bureau of the Census from copies of the import entry and warehouse withdrawal forms that importers are required by law to file with Customs officials (Customs Forms 7501, 7505, and 7506).

### Country and Area of Origin

The country reported in the statistics as the country of origin is defined as the country where the merchandise was grown, mined, or manufactured. In instances where the country of origin cannot be determined, the transactions are credited to the country of shipment.

### Export Statistics (EM-522 and EM-594)

Census export statistics used in the PSM reflect both government and nongovernment exports of domestic and foreign merchandise from the United States (the 50 States and the District of Columbia) to foreign countries and U.S. possessions, without regard to whether or not the exportation involves a commercial transaction. The following types of transactions are excluded from the statistics:

1. Merchandise shipped in-transit through the United States from one foreign country to another, when documented as such with U.S. Customs.
2. Bunker fuels and other supplies and equipment for use on departing vessels, planes, or other carriers engaged in foreign trade.

### Source of Export Information

The official U.S. export statistics are compiled by the Bureau of the Census. Exporters are required to file export documents with Customs officials (Customs Form 7525).

### Country and Area of Destination

The country of destination is defined as the country of ultimate destination or the country where the goods are to be consumed, further processed, or manufactured, as known to the shipper at the time of exportation. If the shipper does not know the country of ultimate destination, the shipment is credited to the last country to which the shipper knows that the merchandise will be shipped in the same form as it was when exported.

## Note 2: Supply

The components of petroleum supply are field production, refinery production, imports, and stock withdrawal or addition:

**Field Production** is the sum of crude oil production (including lease condensate), natural gas processing plant production, and new supply (field production) of other liquids used by refineries.

Crude oil production is estimated based on data received from State conservation agencies. For further explanation, see Explanatory Note 3.

Field production of natural gas plant liquids (NGPL), including finished petroleum products, is reported monthly on survey Form EIA-816, *Monthly Natural Gas Liquids Report.* Negative production will occur when the amount of a product produced during the month is less than the amount of that same product that is reprocessed (input) or reclassified to become another product during the same month. For survey descriptions and other details, see Explanatory Note 1.2.

**Refinery Production** of petroleum products is reported monthly on survey Form EIA-810, *Monthly Refinery Report.* Published production of these products equals refinery production minus refinery input. Refinery production of unfinished oils and of motor and aviation gasoline blending components appears on a net basis under refinery input. Negative production will occur when the amount of a product produced during the month is less than the amount of that same product that is reprocessed (input) or reclassified to become another product during the same month.

**Imports** of crude oil and petroleum products are reported monthly on Form EIA-814, *Monthly Imports Report.* In addition, imports of NGL's are obtained from the Census Bureau Tabulation IM-145. The Census Bureau Tabulation IM-145 summarizes import data from Customs import declarations reported on Customs Forms 7501, 7505, and 7506. Additional data taken from the IM-145 are relatively small quantities of naphtha-type and kerosene-type jet fuels, distillate fuel oils, and residual fuel oils withdrawn from bonded storage for use in international trade. Even though these duty-free fuels are stored on United States shores, they did not enter the United States for domestic consumption and therefore are not included in the Form EIA-814 reporting system.

**Stock Withdrawal (+) or Addition (-)** is calculated by subtracting stocks at the end of the month from stocks at the beginning of the same month. (Note: The beginning stocks of one month are equal to the ending stocks of the previous month.) A positive result (+) would represent a withdrawal from stocks. A negative result (-) would represent a buildup of stocks. For a description of survey forms used to make stock withdrawal or addition calculations, see Explanatory Note 5.

**Unaccounted-for Crude Oil** is a balancing item that represents the difference between crude oil supply and disposition. Crude oil supply is the sum of field production, imports, and stock withdrawals. Crude oil disposition is the sum of exports, refinery input, losses, stock additions, and product supplied. Unaccounted-for crude oil is calcuated by subtracting crude oil supply from crude oil disposition. A positive result indicates that refiners and exporters reported use of more crude oil than was reported to have been available to them. (This occurs, for example, when imports are undercounted due to late reporting or other problems.) A negative result would indicate that more crude oil was reported to have been supplied to refiners and exporters than they reported used.

## Note 3: Domestic Crude Oil Production

Data on crude oil production for States are reported to the Energy Information Administration (EIA) by State government agencies. Data on crude oil production for Federal offshore areas are reported to EIA by the Minerals Management Service of the U. S. Department of the Interior, and the Conservation Committee of California Oil Producers. Currently, all except four of the producing states (Michigan, New York, Ohio, and Pennsylvania) report production data on a monthly basis. These four States report production on an annual basis. Estimates of monthly production for these four States are made by EIA using data reported on Form EIA-182, "Domestic Crude Oil First Purchase Report." After the end of each calendar year, the monthly production estimates are updated using annual reports of the State agencies and the Minerals Management Service.

Table 11 of this publication provides estimates of crude oil production in the latest month for which most State production data are available. There is a time lag of approximately 4 months between the end of the production month and the time when most monthly State crude oil production data become available. In order to present more timely crude oil production estimates, EIA prepares an original, forecasted estimate on the first day of the production month. Approximately 75 days later, this original estimate of monthly crude oil production is replaced by State level interim estimates. The State level interim estimates are based on: (a) data reported by the state (for example, production data for Alaska are typically reported to EIA before the interim estimate is made); (b) first purchase data reported on Form EIA-182; (c) exponential or hyperbolic curve fitted projections based on recent State data; or (d) constant level projections based on the average production rate during a recent time period.

Table B1 is intended to provide further insight into EIA's estimates of monthly U.S. crude oil production. It shows: (a) how the aggregate of reported State data evolves over a period of 18 months; (b) the number of producing States that have not reported production for a given month within that period; and (c) various EIA estimates of monthly crude oil production within that period:

- The original estimate is used in the *Weekly Petroleum Status Report,* and in the *Petroleum Supply Monthly* Tables S1 and S2 until replaced by the interim estimate.
- The interim estimate is used in the *Petroleum Supply Monthly* Tables 1 through 10, and in Tables S1 and S2 until replaced by the final estimate.
- The initial estimate based upon first purchase data collected on Form EIA-182 is used as an estimation tool in

generating the interim estimate. The initial volume represents the best estimate available 40 days after the end of the production month and includes imputation for nonresponse and possible reporting errors. The revised volume is the best estimate available 70 days after the end of the production month and includes imputation as needed. A final revision is published concurrent with publication of EIA-182 price data in the *Petroleum Marketing Annual.*

- The final estimate is published in the *Petroleum Supply Annual.*

### Table B1. U.S. Crude Oil[1] Production Estimates and Reported State[2] Data by Month (Thousand Barrels per Day)

| Date of Data Availability | 6-87 | 7-87 | 8-87 | 9-87 | 10-87 | 11-87 | 12-87 | 1-88 | 2-88 | 3-88 | 4-88 | 5-88 | 6-88 | 7-88 | 8-88 | 9-88 | 10-88 | 11-88 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Reported State Data[3] | | | | | | | | | | | | | | | | | |
| 7-14-87 | 0 | | | | | | | | | | | | | | | | | |
| 8-14-87 | 2012 | 0 | | | | | | | | | | | | | | | | |
| 9-14-87 | 4665 | 1999 | 0 | | | | | | | | | | | | | | | |
| 10-14-87 | 7672 | 4264 | 1997 | 0 | | | | | | | | | | | | | | |
| 11-14-87 | 8139 | 7276 | 2971 | 1945 | 0 | | | | | | | | | | | | | |
| 12-14-87 | 8140 | 7752 | 7724 | 5008 | 2088 | 0 | | | | | | | | | | | | |
| 1-14-88 | 8179 | 7756 | 7731 | 7252 | 4866 | 2152 | 0 | | | | | | | | | | | |
| 2-14-88 | 8191 | 8095 | 8034 | 8039 | 7703 | 5296 | 2127 | 0 | | | | | | | | | | |
| 3-14-88 | 8191 | 8095 | 8071 | 8039 | 8190 | 8205 | 3208 | 2086 | 0 | | | | | | | | | |
| 4-14-88 | 8157 | 8133 | 8093 | 8090 | 8249 | 8286 | 8204 | 5111 | 2161 | 0 | | | | | | | | |
| 5-14-88 | 8279 | 8251 | 8210 | 8205 | 8365 | 8401 | 8318 | 7156 | 5743 | 2151 | 0 | | | | | | | |
| 6-14-88 | 8279 | 8251 | 8210 | 8206 | 8365 | 8403 | 8318 | 8086 | 8103 | 5767 | 2095 | 0 | | | | | | |
| 7-14-88 | 8279 | 8251 | 8210 | 8206 | 8365 | 8403 | 8319 | 8079 | 8183 | 7270 | 2686 | 2087 | 0 | | | | | |
| 8-14-88 | 8282 | 8256 | 8212 | 8217 | 8379 | 8411 | 8330 | 8134 | 8198 | 8142 | 7188 | 4859 | 2051 | 0 | | | | |
| 9-14-88 | 8283 | 8257 | 8212 | 8217 | 8380 | 8412 | 8331 | 8134 | 8240 | 8142 | 8129 | 7968 | 5005 | 2032 | 0 | | | |
| 10-14-88 | 8287 | 8261 | 8217 | 8222 | 8384 | 8416 | 8335 | 8134 | 8249 | 8184 | 8131 | 8059 | 7904 | 5083 | 2128 | 0 | | |
| 11-14-88 | 8287 | 8261 | 8217 | 8222 | 8384 | 8415 | 8335 | 8134 | 8240 | 8185 | 8134 | 8061 | 7995 | 7710 | 5081 | 2105 | 0 | 0 |
| | Producing States Without Reported Monthly Production[4] | | | | | | | | | | | | | | | | | |
| 11-14-88 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 8 | 14 | 28 | 33 | 33 |

| Type of Estimate | 6-87 | 7-87 | 8-87 | 9-87 | 10-87 | 11-87 | 12-87 | 1-88 | 2-88 | 3-88 | 4-88 | 5-88 | 6-88 | 7-88 | 8-88 | 9-88 | 10-88 | 11-88 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Production Estimate | | | | | | | | | | | | | | | | | |
| Original[5] | 8303 | 8287 | 8204 | 8162 | 8281 | 8283 | 8348 | 8395 | 8353 | 8306 | 8269 | 8240 | 8210 | 8189 | 8128 | 8147 | 8085 | 8025 |
| Interim[6] | 8263 | 8242 | 8190 | 8190 | 8293 | 8330 | 8340 | 8245 | 8376 | 8347 | 8268 | 8203 | 8158 | 8059 | 8063 | 7900 | | |
| Form EIA-182 | | | | | | | | | | | | | | | | | | |
| Initial | 8168 | 8078 | 8022 | 8110 | 8151 | 8162 | 8144 | 8017 | 8239 | 8138 | 8106 | 8009 | 8045 | 7853 | 7895 | 7752 | | |
| Revised | 8178 | 8082 | 8032 | 8084 | 8153 | 8173 | 8180 | 8048 | 8206 | 8134 | 8099 | 8015 | 8044 | 7839 | 7896 | | | |
| Final[7] | 8279 | 8251 | 8210 | 8205 | 8364 | 8397 | 8318 | | | | | | | | | | | |

[1] Includes lease condensate.

[2] Includes Federal offshore areas, Gulf of Mexico (PAD District III) and Pacific (PAD District V), as two separate reporting entities.

[3] Includes EIA prorated monthly production in 1987 (annual average of 115 thousand barrels per day) for four States (Michigan, New York, Ohio, and Pennsylvania) for which only annual State data are available.

[4] Michigan monthly production data (averaging roughly 65,000 barrels per day) from January through June 1987, reported in prior months, was excluded from the data reported as of 4-14-88. Michigan, New York, Ohio, and Pennsylvania are counted as having monthly reported data in 1987 after their annual reports were received. These data were first reported as of 5-14-88.

[5] Original estimates were made on the first of each month.

[6] Interim estimates were made 44 days after the end of the production month.

[7] Published in the *Petroleum Supply Annual* 1987 DOE/EIA 0340(87)/2.

## Note 4: Disposition

The components of petroleum disposition are crude oil losses, refinery inputs, exports, and products supplied for domestic consumption.

**Crude Oil Losses** is the sum of crude oil losses at refineries reported for all refineries on Form EIA-810, *Monthly Refinery Report.*

**Refinery Inputs** of crude oil, natural gas plant liquids, and other liquids are reported monthly on survey Form EIA-810, *Monthly Refinery Report.* Published inputs of unfinished oils and of motor and aviation gasoline blending components equal refinery input minus refinery output. Refinery inputs of finished petroleum products are reported on a net basis under refinery production.

**Exports** of crude oil and petroleum products are compiled from Census Bureau tabulations EM-522 and EM-594. Exports include crude oil shipments to Puerto Rico, and the Virgin Islands, which are obtained from refinery receipts reported on Form EIA-810, *Monthly Refinery Report,* by refineries located in these places.

**Product Supplied** for each product is calculated by summing field production plus refinery production, plus imports, plus stock withdrawal or minus stock addition, minus crude oil losses (plus net receipts when calculated on a PAD District basis), minus refinery input, minus exports. This formula ensures that total disposition equals total supply.

Product supplied indicates those quantities of petroleum products supplied for domestic consumption. Occasionally, the result for a product is negative because total disposition of the product exceeds total supply. Negative product supplied may occur for a number of reasons: (1) product reclassification has not been reported; (2) data were misreported or reported late; (3) in the case of calculations on a PAD District basis, the figure for net receipts was inaccurate because the coverage of interdistrict movements was incomplete; and (4) products such as gasoline blending components and unfinished oils have entered the primary supply channels with their production net having been reported, e.g., streams returned to refineries from petrochemical plants.

Product supplied for crude oil is the sum of crude oil burned on leases and by pipelines as fuel oil. These data are reported on Form EIA-813, *Monthly Crude Oil Report.* Prior to January 1983, crude oil burned on leases and by pipelines as fuel oil were reported as either distillate or residual fuel oil and included in product supplied for these products.

## Note 5: Stocks

Primary stocks of crude oil are the sum of ending stocks reported monthly on Form EIA-810, *Monthly Refinery Report,* and on Form EIA-813, *Monthly Crude Oil Report.* Crude oil held in the Strategic Petroleum Reserve is included unless otherwise noted. Alaskan crude oil in-transit is also included. Primary stocks of petroleum products are summed from data reported on Form EIA-816, *Monthly Natural Gas Liquids Report,* Form EIA-810, *Monthly Refinery Report,* Form EIA-811, *Monthly Bulk Terminal Report,* and on Form EIA-812, *Monthly Product Pipeline Report.* Primary stocks of petroleum products do not include either secondary stocks held by dealers and jobbers or tertiary stocks held by consumers. For survey descriptions and other details, see Explanatory Note 1.2.

## Note 6: Average Stock Levels

The national inventory (stocks) graphs for total petroleum products, crude oil, motor gasoline, distillate fuel oil, residual oil, and liquefied petroleum gases, in this publication include features to assist in comparing current inventory levels with past inventory levels and minimum operating levels are described below.

The graphs displaying inventory levels of crude oil and petroleum products, crude oil, motor gasoline, distillate fuel oil, residual fuel oil, and liquefied petroleum gases, provide the reader with actual inventory data compared to an *average range* from the most recent 3-year period running from January through December or from July through June. The ranges are updated every six months in April and October. The 3-year period is adjusted by dropping the oldest 6 months and including the most recent 6 months. The ranges also reflect seasonal variation determined from a longer time period. The seasonal factors, which determine the shape of the upper and lower curves, are updated annually in October, using the most recent year's final monthly data.

The monthly seasonal factors are estimated by means of a seasonal adjustment technique developed at the Bureau of the Census (Census X-11). The seasonal factors are assumed to be stable (i.e., unchanging from year to year) and additive (i.e., the series is deseasonalized by subtracting the seasonal factor for the appropriate month from the report inventory levels). The intent of deseasonalization is to remove only annual variation from the data. Thus, a deseasonalized series would contain the same trends, cyclical components, and irregularities as the original data. The seasonal factors for distillate fuel oil, residual fuel oil, and liquefied petroleum gases, were derived using monthly data from 1979-1985.

After seasonal factors are derived, data from the most recent 3-year period (January-December or July-June) are deseasonalized. The average of the deseasonalized 36-month series determines the midpoint of the deseasonalized average band. The standard deviation of the deseasonalized 36-months is calculated adjusting for extreme data points. The upper curve of the average range is defined as the average plus the seasonal factors plus the standard deviation. The lower curve is defined as the average plus the seasonal factors minus the standard deviation. Thus, the width of the *average range* is twice the standard deviation.

## Note 7: Movements

Movements of crude oil between PAD Districts are reported on Form EIA-817, *Monthly Tanker and Barge Movement Report*, and on Form EIA-813, *Monthly Crude Oil Report*. Petroleum product movements are reported on Form EIA-817, *Monthly Tanker and Barge Movement Report*, and EIA-812, *Monthly Product Pipeline Report*. Net receipts is the difference between total movements into and total movements out of each PAD District by pipeline, tanker, and barge. For survey descriptions and other details, see Explanatory Note 1.2.

## Note 8: Preliminary Monthly Statistics

Weekly data (Forms EIA-800, 801, 802, 803, and 804) are used to estimate the most recent monthly values for the "Summary Statistics" section. Since some of the weekly reporting periods overlap two adjacent months, it is necessary to use weighting factors in the calculation of the monthly values.

To estimate crude oil and petroleum product imports, crude oil input to refineries and production of petroleum products for a specific month, the weekly estimates are weighted by the number of days of that month included in each week, then summed.

End-of-month stock levels of crude oil and the major products (motor gasoline, distillate fuel oil, and residual fuel oil) are calculated in a similar manner, but use only the two weekly reporting periods that cover the end-of-week stocks before and after the end of the month. The end-of-month stock level is calculated by first calculating the stock change between the two weeks. The daily stock change between the two end-of-week stock levels is then calculated. This number is multiplied by the weighting factor of the earlier of the two weeks (the week that covers the last day of the month of interest). This change is added to the earlier of the two end-of-week stock levels to estimate the end-of-month stock level.

Preliminary monthly estimates of domestic crude oil production are calculated as described in Explanatory Note 3.

## Note 9: Notes on Tables

**Note 9.1 Crude Oil and Petroleum Products Overview** statistics on the referenced line appear in Table 4 of the "Detailed Statistics," except where noted.

- Crude Oil and Petroleum Products Stock Withdrawal (+) or Addition (-), Petroleum Products Supplied, Total Imports, Crude Oil Imports, Total Exports, and Crude Oil Exports appear as labeled in Table 4. Total Production and Crude Oil Production appear under Field Production in Table 4.

- Natural Gas Plant Production is the sum of Natural Gas Liquids and Finished Petroleum Products Field Production in Table 4.

- Petroleum Products Imports is the sum of Natural Gas Liquids and LRGs, Other Liquids, and Finished Petroleum Products Imports in Table 4.

- Total Crude Oil and Petroleum Products Ending Stocks appear in thousand barrels in Table 2.

**Note 9.2 Crude Oil Supply and Disposition.** statistics on the referenced line appear in Table 1 of the "Detailed Statistics," except where noted.

- Total Domestic Field Production, Alaskan Field Production, SPR Imports, Other Imports (synonymous with Gross Imports Excl. SPR), SPR and Other Primary Stocks Withdrawal (+) or Addition (-), Unaccounted for Crude Oil, Refinery Inputs, and Exports appear as labeled in Table 1.

- Crude Losses and Product Supplied appear as labeled in Table 4.

- SPR Ending Stocks and Other Primary Ending Stocks (synonymous with stocks excluding SPR) appear in thousand barrels in Table 1.

- Total Crude Oil Ending Stocks appear in thousand barrels in Table 2.

- Total Imports appear in Table 4.

**Note 9.3 Finished Motor Gasoline Supply and Disposition** statistics on the referenced line appear in Table 4 of the "Detailed Statistics," except where noted.

- Total Production is the sum of Field Production and Refinery Production in Table 4.

- Imports, Stock Withdrawal (+) or Addition (-), Exports, and Product Supplied appear as labeled in Table 4.

- Unleaded Percent of Total Product Supplied represents the ratio of finished unleaded motor gasoline product supplied to total finished motor gasoline product supplied, multiplied by 100 and rounded to the nearest tenth.

- Ending stocks are aggregated from ending stocks in thousand barrels in Table 2.

**Note 9.4 Distillate and Residual Fuel Oil Supply and Disposition** statistics on the referenced lines appear in Table 4 of the "Detailed Statistics," except where noted.

- Total Production is the sum of Field Production and Refinery Production in Table 4.

- Imports, Stock Withdrawal (+) or Addition (-), Exports, and Product Supplied appear as labeled in Table 4.

- Ending stocks appear in thousand barrels in Table 2.

**Note 9.5 Liquefied Petroleum Gases Supply and Disposition** statistics represent the aggregation of statistics on ethane, ethylene, propane, propylene, butane, butylene, and isobutane. The statistics on the referenced line appear in Table 4 of the "Detailed Statistics," except where noted.

- Total Production is the sum of Field Production and Refinery Production in Table 4.

- Imports, Stocks Withdrawal (+) or Addition (-), Refinery Inputs, Exports, and Product Supplied appear as labeled in Table 4.

- Ending stocks appear in thousand barrels in Table 2.

**Note 9.6 Other Petroleum Products Supply and Disposition** statistics represent the aggregation of statistics on pentanes plus, other liquids, and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil, and liquefied petroleum gases. The statistics on the referenced line are aggregated from Table 4 of the "Detailed Statistics," except where noted.

- Total production is the aggregated sum of Field Production and Refinery Production in Table 4.

- Imports, Stock Withdrawal (+) or Addition (-), Refinery Inputs, Exports, and Product Supplied are aggregated from Table 4.

- Ending stocks are aggregated from ending stocks in thousand barrels in Table 2.

**Note 9.7 Table 1. U.S. Petroleum Balance**

- Lines (1) through (3): Crude oil (including lease condensate) production for *Alaska, Lower 48 States*, and *Total U.S.* are calculated by calling the conservation agency in Alaska for Alaskan crude oil production during the month, estimating crude oil production in the United States (see Explanatory Note 3), and taking the difference to equal production in the Lower 48 States.

- Line (5): *SPR Imports* are reported on survey Form EIA-814.

- Line (12): *Total Other Sources* equals crude oil stock withdrawal (+) or addition (-) plus unaccounted for crude oil minus crude oil losses minus crude oil product supplied in Table 2.

- Line (14): Natural Gas Plant Liquids (NGPL) *Field Production* equals field production of natural gas liquids (NGL) plus field production of finished petroleum products in Table 2.

- Line (15): NGPL *Net Imports* equals the sum of the imports of pentanes plus minus the exports of pentanes plus in Table 2.

- Line (16): NGPL *Stock Withdrawal (+) or Addition (-)* is equal to the stock withdrawal (+) or addition (-) of pentanes plus in Table 2.

- Line (17): *Total NGPL Supply* equals the sum of lines (14), (15), and (16).

- Line (18): Other Liquids *Stock Withdrawal (+) or Addition (-)* equals the aggregate stock withdrawal (+) or addition (-) for other hydrocarbons and alcohol, unfinished oils, motor gasoline blending components, and aviation gasoline blending components in Table 2.

- Line (20): *Other Hydrocarbons and Alcohol New Supply* equals the field production of same in Table 2.

- Line (21): *Refinery Processing Gain* is a balancing item equal to total refinery production minus total refinery input in Table 2.

- Line (23): *Total Other Liquids* equals the sum of lines (18) through (22).

- Line (24): *Total Production of Products* equals crude oil input to refineries plus field production of natural gas

liquids and LRG and finished petroleum products; plus imports of pentanes plus; plus stock withdrawal (+) or addition (-) of pentanes plus; plus stock withdrawal (+) or addition (-) of other liquids; plus imports of other liquids; plus field production of other liquids; plus total refinery production; minus total refinery input; plus crude oil product supplied in Table 2.

- Line (25): *Gross Imports* of Refined Products equals imports of LPG plus imports of finished petroleum products in Table 2.
- Line (26): *Exports* of Refined Products equals exports of LPG plus exports of finished petroleum products in Table 2.
- Line (27): *Net Imports* of Refined Products equals the difference between lines (25) and (26).
- Line (28): *Total New Supply of Products* equals crude oil input to refineries plus field production of natural gas liquids and LRG and finished petroleum products; plus imports of pentanes plus; plus stock withdrawal (+) or addition (-) of pentanes plus; plus stock withdrawal (+) or addition (-) of other liquids; plus imports of other liquids; plus total field production of other liquids; plus total refinery production; minus total refinery input; minus crude oil product supplied plus imports of LPG and finished petroleum products; minus exports of LPG and finished petroleum products in Table 2.
- Line (29): *Refined Products Stock Withdrawal (+) or Addition (-)* equals the sum of stock withdrawal (+) or addition (-) for LPG and finished petroleum products in Table 2.
- Line (30): *Total Petroleum Products Supplied for Domestic Use* equals total products supplied in Table 2.
- Lines (31) through (34): Equal the respective products supplied in Table 2.
- Line (35): *Other Products Supplied* equals the sum of pentanes plus, aviation gasoline, naphtha-type jet fuel, kerosene-type jet fuel, naphtha <400 Deg. F. for petrochemical feedstock use, other oils >400 Deg. F. for petrochemical feedstock use, special naphthas, lubricants, waxes, petroleum coke, asphalt and road oil, still gas, unfinished oils, motor gasoline blending components, aviation gasoline blending components, and miscellaneous products supplied in Table 2.
- Line (37): *Total Product Supplied* is equal to total products supplied in Table 2.
- The sum of lines (38) and (39): Stocks of *Crude Oil and Lease Condensate (Excluding SPR)* and stocks held by the *Strategic Petroleum Reserve* equals ending stocks of crude oil in Table 2.
- Line (43): Stocks of *Finished Refined Products* equals the sum of liquefied petroleum gases and finished petroleum products stocks in Table 2.

## Note 10: New Stock Basis

In January 1975, 1981, and 1983, numerous respondents were added to bulk terminal and pipeline surveys affecting subsequent stocks reported and stock withdrawal calculations. Using the expanded coverage (new basis), the end-of-year stocks, in million barrels, would have been:

- Crude Oil: 1982 - 645 (Total) and 351 (Other Primary).
- Crude Oil and Petroleum Products: 1974 - 1,121; 1980 - 1,425; and 1982 - 1,462.
- Motor Gasoline: 1974 - 225; 1980 - 263; 1982 - 244 (Total) and 203 (Finished).
- Distillate Fuel Oil: 1974 - 224; 1980 - 205; and 1982 - 186.
- Residual Fuel Oil: 1974 - 75; 1980 - 91; and 1982 - 68.
- Liquefied Petroleum Gases: 1974 - 113; 1980 - 128; and 1982 - 103.
- Other Petroleum Products: 1974 - 220; 1980 - 249; and 1982 - 259.
- Stock withdrawal calculations beginning in 1975, 1981, and 1983 were made using new basis stock levels.

In January 1984, changes were made in the reporting of natural gas liquids. As a result, unfractionated stream, which was formerly included in "Other Petroleum Products Supply and Disposition" table in the "Summary Statistics," is now reported on a component basis (ethane, propane, normal butane, isobutane, and pentanes plus). Most of these stocks will now appear in the "Liquefied Petroleum Gases Supply and Disposition" table of the "Summary Statistics." This change will affect stocks reported and stock withdrawals in each table. Under the new basis, end-of-year 1983 stocks, in million barrels, would have been:

- Liquefied Petroleum Gases: 1983 - 108.
- Other Petroleum Products: 1983 - 248.

## Note 11: Stocks of Alaskan Crude Oil

Stocks of Alaskan crude oil in-transit were included for the first time in January 1981. The major impact of this change is on the reporting of stock withdrawal calculations. Using the expanded coverage (new basis), 1980 end-of-year stocks, in million barrels, would have been 488 (Total) and 380 (Other Primary).

## Note 12: 1981 Changes in Petroleum Industry Reporting

Petroleum statistics contained in this report for all years through 1980 were developed using definitions, concepts, reporting procedures, and aggregation methods that are consistent with those developed by the U.S. Bureau of Mines. Research conducted by the Energy Information Administration in 1979 and 1980 indicated that changes had occurred in the petroleum industry that were not being adequately reflected in EIA's reporting system.

EIA reporting forms, definitions, and procedures were modified beginning in January 1981 to describe industry operations more accurately. Unfortunately, empirical information is not available to precisely measure the data shortcomings through 1980. However, estimates of the magnitudes of differences in the major data series are described below to form a basis for comparing 1979, 1980, and 1981 data.

### Motor Gasoline

Prior to 1979, the EIA product-supplied series for motor gasoline was consistently about 2 percent lower than the Federal Highway Administration (FHWA) gasoline-sales data series, which is derived from State tax receipts. The difference increased to about 3 percent in 1979 and 1980. There were two primary causes for this growing difference. First, refinery operations, particularly the flows of unfinished oils and the redesignation of some finished products, were not being accurately described on the EIA survey forms. Second, a large amount of gasoline was being produced away from refineries at "downstream blending stations" to take advantage of provisions in regulations governing the amount of lead that could be added. These blending stations were not reporting gasoline production to the EIA until the data system was changed in January 1981.

Quantitative estimates of the magnitude of the difference in EIA's gasoline product supplied data in 1979 and 1980 have been made by the EIA and the American Petroleum Institute (API). The following table provides 1979 and 1980 data as published in the *Petroleum Statement, Annual*, as well as EIA and API estimates of "recast" motor gasoline product supplied.

EIA recast estimates were based upon preliminary monthly information in the *Monthly Petroleum Statement*. The ranges displayed in the EIA column reflect uncertainty in the estimates. Also shown are the FHWA motor gasoline sales statistics for those years.

### Table B2. Finished Motor Gasoline Product Supplied
(Thousand Barrels per Day)

| | EIA Reported | API Recast | EIA Recast | FHWA[1] |
|---|---|---|---|---|
| 1979 ..... | 7,034 | 7,302 | 7,183-7,347 | 7,258 |
| 1980 ..... | 6,579 | 6,882 | 6,806-6,889 | 6,792 |

[1] FHWA gasoline statistics based on data from Federal Highway Administration, Estimate of Total Gasoline Use, Table MF-21A published October 1980 and September 1981. Aviation gasoline (Table MF-24) has been subtracted from FHWA product supplied quantities to make data comparable.

### Distillate and Residual Fuel Oil

Distillate and residual fuel oil refinery production statistics through 1980 were adjusted to account for an imbalance between unfinished oil supply and disposition. The reported quantities of refinery inputs of unfinished oils typically exceed the available supply of unfinished oils. It has been assumed that this occurs when distillate and residual fuel oils produced by a refinery are shipped to another refinery, where it is treated as unfinished oil. This oil is then reprocessed rather than used or sold as distillate or residual fuel oil.

For many years (including 1980), the difference between unfinished oil disposition and supply was subtracted from distillate and residual fuel oil production to adjust for this discrepancy. Two-thirds of the difference was applied to distillate, and one-third to residual fuel oil.

Beginning in January 1981, this adjustment was discontinued because there was not sufficient empirical evidence to support it. The following table presents distillate and residual fuel oil refinery production in 1979 and 1980 as published (adjusted) and on the same basis as 1981 statistics (unadjusted) to permit comparison.

Adjusted distillate and residual fuel oil product supplied volumes differ from the unadjusted volumes by the same amounts as the adjusted and unadjusted production volumes.

## Table B3. Distillate and Residual Fuel Oil Production and Product Supplied
(Thousand Barrels per Day)

| | Adjusted Refinery Production | Unadjusted Refinery Production | Difference | Unadjusted Product Supplied |
|---|---|---|---|---|
| Distillate Fuel Oil | | | | |
| 1979 ............ | 3,152 | 3,169 | 16 | 3,327 |
| 1980 ............ | 2,661 | 2,764 | 103 | 2,969 |
| Residual Fuel Oil | | | | |
| 1979 ............ | 1,687 | 1,695 | 8 | 2,83 |
| 1980 ............ | 1,580 | 1,634 | 54 | 2,562 |

### Total Petroleum Products

The imbalance between the supply and disposition of unfinished oils and gasoline blending components is included with other products (line 35) in the U.S. Petroleum Balance (Table 1). These imbalances are reported as negative product supplied in the Other Liquids section, Supply and Disposition Statistics (Table 2). Since these changes only involve redistribution of the volumes of gasoline, distillate and residual fuel oil, gasoline blending components, and unfinished oils, the total volume of petroleum products supplied remains unaffected by them.

## Note 13: Natural Gas Liquids Reporting Changes

Beginning in January 1984, a number of changes in the reporting of natural gas liquids (NGL) were implemented. The modified system reflects supply and disposition of NGL on a component, rather than product, basis.

From 1979 to 1983, the EIA collected and reported information on the supply and disposition of nine NGL products. Beginning with January 1984, NGL supply and disposition data were reported on a five component basis (see Table B4) to be consistent with record-keeping practices used by the industry. The following table shows the product category under the new and old basis. Four PSRS surveys were modified beginning in January 1984. They were:

EIA-810 *Monthly Refinery Report*
EIA-811 *Monthly Bulk Terminal Report*
EIA-812 *Monthly Product Pipeline Report*
EIA-816 *Monthly Natural Gas Liquids Report*

A fifth survey, the Form EIA-814, *Monthly Imports Report* (formerly Form ERA-60), was not modified. Adjustments are applied to NGL imports data to make them consistent with the revised reporting system (See Explanatory Note 14).

## Table B4. Product Basis vs. Component Basis Reporting

| | 1984 Component Basis | | | | |
|---|---|---|---|---|---|
| 1979-1983 Product Basis | Ethane | Propane | Normal Butane | Isobutane | Pentanes Plus |
| Ethane | • | | | | |
| Ethane-Propane Mixtures | • | • | | | |
| Propane | | • | | | |
| Butane-Propane Mixtures | | • | • | | |
| Butane | | | • | | |
| Isobutane | | | | • | |
| Unfractionated Stream | • | • | • | • | • |
| Natural Gasoline and Isopentane | | | | | • |
| Plant Condensate | | | | | • |

## Note 14: NGL Import/Export Algorithms

Beginning in January 1984, the Energy Information Administration (EIA) implemented changes in the reporting of natural gas liquids (NGL) supply data, moving from a nine-product slate basis to a five-component slate basis that corresponds to industry record-keeping practices. Changes could not be made to the import and export systems. Therefore, in order to allocate imports and exports of mixed NGL streams to individual component parts, the EIA developed a statistical algorithm.

### Imports

The imports algorithm is based on information gathered from the larger importers of NGL, who were asked to provide component analysis of the products they imported during the first six months of 1983. The percentages shown in the following table are derived from the weighted averages of the data provided by the importers.

### Exports

The export algorithm is based on information gathered from the larger exporters of NGL, who were asked to provide component analysis of the products they exported during 1983. The percentages shown in the following table are derived from the weighted averages of the data provided by the exporters. It was necessary to derive percentages by

## Table B5. Algorithm for Allocating NGL Imports/Exports (Percent)

| | EIA Component Slate | | | | |
|---|---|---|---|---|---|
| | Ethane | Propane | Normal Butane | Isobutane | Pentanes Plus |
| Import Product | | | | | |
| Natural Gasoline An Isopentane (EIA-814) | -- | -- | -- | -- | 100 |
| Plant Condensate (EIA-814) | -- | -- | -- | -- | 100 |
| Ethane (IM-145) | 100 | -- | -- | -- | -- |
| Propane (IM-145) | -- | 100 | -- | -- | -- |
| Butane (IM-145) | -- | -- | 65 | 35 | -- |
| Butane-Propane Mixtures (IM-145) | -- | 40 | 35 | 20 | 5 |
| Ethane-Propane Mixtures (IM-145) | 60 | 40 | -- | -- | -- |
| Export Product | | | | | |
| Ethane (All PAD Districts) | 100 | -- | -- | -- | -- |
| Propane (All PAD Districts) | -- | 100 | -- | -- | -- |
| Butane (All PAD Districts) | -- | -- | 100 | -- | -- |
| Mixed Streams | | | | | |
| PAD Districts I, IV, V | -- | 40 | 60 | -- | -- |
| PAD District II | 30 | 25 | 15 | 15 | 15 |
| PAD District III | -- | 80 | 20 | -- | -- |

Petroleum Administration for Defense (PAD) Districts of exportation, due to the wide variation of components included in the mixed streams.

## Note 15: Addition of Crude Oil Pipeline Movements Data

Beginning in January 1985, inter-PAD District pipeline movements of crude oil were included in the PSM. Crude oil pipeline movements are used in the crude oil supply balance at the PAD District level but do not affect National level statistics. As a result of including these movements, *Net Receipts* of crude oil and *Unaccounted for Crude Oil* at the PAD District level changed significantly. Also affected were crude oil imports and unfinished oil imports at the PAD District level which are provided by *PAD District of entry* (Tables 6-10) and by *PAD District of processing* (Tables 16-19).

The tables in the PSM that were changed due to the inclusion of inter-PAD District pipeline movements of crude oil are listed below.

- Tables 6-10, "PAD District I to V, Supply and Disposition of Crude Oil and Petroleum Products." 1985 crude oil imports and unfinished oil imports in Tables 6 through 10 are now reported at the *PAD District of entry* rather than at the *PAD District of processing. Net Receipts* now include movements by pipeline as well as by tanker and barge.
- Table 26, "Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, and Barge Between PAD Districts." The crude oil line includes movements by pipeline as well as by tanker and barge.
- Table 27, "Movements of Crude Oil and Petroleum Products by Pipeline Between PAD Districts." A line was added to report crude oil movements.
- Table 29, "Net Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, and Barge Between PAD Districts." The crude oil line includes net movements by pipeline as well as by tanker and barge.

## Note 16: 1986 Changes in Petroleum Industry Reporting

Beginning in January 1986, several changes to the Petroleum Supply Reporting System (PSRS) went into effect. These changes affected the frame of operators of petroleum facilities required to complete the monthly surveys in the PSRS and resulted in some changes to the tables presented in the *Petroleum Supply Monthly* (PSM).

### Changes in Survey Frames

As a result of frames maintenance activities, 39 respondents were added to the monthly survey frames. The following table shows the impact of the data reported by the new respondents on published data for production and stocks of major petroleum products.

## Table B6. Impact of New Respondents to December 1985 PSM Data

| | Refinery Production (thousand barrels per day) | | Stocks[1] (thousand barrels) | |
|---|---|---|---|---|
| Product | Reported by New Respondents | Published U.S. Total | Reported by New Respondents | Published U.S. Total |
| Leaded Gasoline | 1.3 | 2,326 | 224 | 81,379 |
| Unleaded Gasoline | 0.6 | 4,323 | 276 | 108,422 |
| Distillate Fuel Oil | 0 | 3,174 | 1,217 | 143,911 |
| Residual Fuel Oil | 0 | 1,055 | 1,747 | 50,671 |
| NGL's & LRG's | 0 | 393 | 409 | 80,898 |
| Other Products | 0 | 3,302 | 1,413 | 239,158 |
| Crude Oil (excl. SPR) | -- | -- | 2,314 | 318,695 |

[1] Stocks as of December 31, 1985.

Also, beginning in January 1986, a major integrated petroleum company consolidated production and stocks reporting for some of its facilities. Data previously reported separately on Form EIA-811, *Monthly Bulk Terminal Report*, and on Form EIA-816, *Monthly Natural Gas Liquids Report* for two facilities have been combined with data reported for two refineries on Form EIA-810, *Monthly Refinery Report*. The primary impact of this reporting change is on Table 24, "Stocks of Crude Oil and Petroleum Products by PAD District," which will show a decrease in natural gas liquids (NGL) stocks at bulk terminals and natural gas processing plants, and an increase in NGL stocks at refineries.

### Changes in Publication Tables

Several changes have been made to tables in the PSM either as a direct result of changes in reporting requirements or to improve the usefulness of the publication. These changes are:

- Table 13, "Refinery Input of Crude Oil and Petroleum Products by PAD District"

  -Alaskan crude oil receipts are now shown separately.

- Table 14, "Refinery Production of Petroleum Products by PAD District"

  -The "petrochemical feedstock use" and "other use" are no longer shown separately for still gas or for liquefied refinery gases.

- Tables 16 and 17, "Imports of Crude Oil and Petroleum Products by PAD District"

  -Imports of unfinished oils are now separated into four categories: naphthas and lighter, kerosene and light gas oils, heavy gas oils, and residuum.

- Tables 18 and 19, "Imports of Crude Oil and Petroleum Products by Source"

  -Countries formerly included in the categories "Other Western Hemisphere" and "Other Eastern Hemisphere" are shown individually.

- Table 24, "Stocks of Crude Oil and Petroleum Products by PAD District"

  -The breakout between "petrochemical feedstock use" and "other use" for each liquefied petroleum gas was eliminated.

## Note 17: 1987 Changes in the Petroleum Supply Reporting System

Several changes to the Petroleum Supply Reporting System went into effect at the beginning of January 1987. These changes were made as part of the Energy Information Administration's (EIA's) continuing effort to provide pertinent, timely and consistent energy information.

### Changes in Data Collection and Reporting Systems

- Fresh feed input to catalytic cracking units, hydrocracking units and cokers were added to the Form EIA-810, *Monthly Refinery Report*.

### Changes in Publications

- The "Appalachian No. 2" Refining District has been combined with the "Indiana, Illinois, Kentucky," Refining District. This affects PSM Tables 12-15, 24, 30, and 31.

- Fresh feed inputs to catalytic cracking units, hydrocracking units and cokers are included in Table 13, "Refinery Input of Crude Oil and Petroleum Products by PAD District."

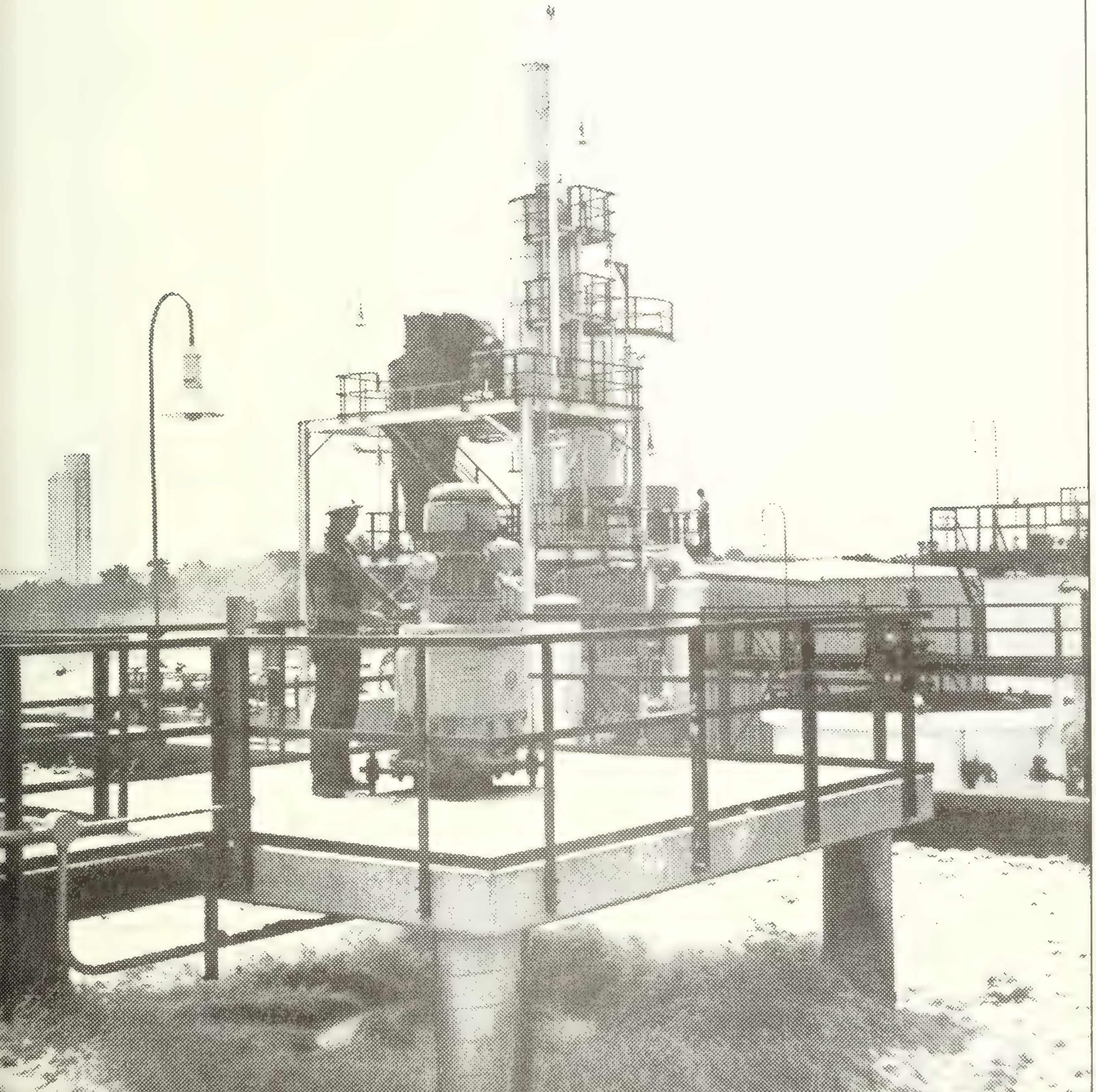
## Clarification

In 1986, several refineries and terminals in the United States applied for Foreign Trade Zone (FTZ) status and applications from three refineries were approved. Consequently, during 1986, some refineries with FTZ status were treated as if they were within the United States while the Hawaiian FTZ was considered outside.

- Effective with the January 1987 data, all Foreign Trade Zone facilities located within the 50 United States are considered domestic entities and are included in statistics in the PSM. The principal differences in the PSM data series are about a 1 percent increase in crude oil imports and a 3 percent decrease in product imports.

# Appendix C

## Impact of Resubmissions on Major Series, 1988



# Appendix C

## Table C1. Impact of Resubmissions on Major Series, 1988
(Thousand Barrels per Day, Except Where Noted)

| Product | January | | February | | March | | April | | May | | June | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PSM Value | Difference | PSM Value | Difference | PSM Value | Difference | PSM Value | Difference | PSM Value | Difference | PSM Value | Difference |
| **Inputs** | | | | | | | | | | | | |
| Crude Oil | 12,975 | (s) | 12,715 | -20 | 13,072 | 8 | 13,167 | 0 | 13,472 | (s) | 13,528 | (s) |
| LPG's | 366 | -8 | 336 | 7 | 266 | 2 | 256 | 1 | 253 | 2 | 234 | (s) |
| **Production** | | | | | | | | | | | | |
| LPG's | 1,723 | 6 | 1,757 | 10 | 1,802 | 14 | 1,796 | 8 | 1,809 | 5 | 1,804 | 6 |
| Finished Motor Gasoline | 6,723 | 7 | 6,736 | (s) | 6,695 | 20 | 6,906 | 1 | 6,847 | 3 | 6,983 | 0 |
| Naphtha-Type Jet Fuel | 184 | (s) | 178 | (s) | 209 | 2 | 203 | 0 | 229 | (s) | 208 | 0 |
| Kerosene-Type Jet Fuel | 1,231 | 1 | 1,205 | 1 | 1,243 | 0 | 1,088 | 0 | 1,060 | 0 | 1,133 | 0 |
| Kerosene | 104 | 0 | 118 | (s) | 68 | (s) | 50 | 0 | 48 | 0 | 55 | 0 |
| Distillate Fuel Oil | 3,008 | (s) | 2,683 | -9 | 2,720 | -10 | 2,869 | (s) | 2,931 | (s) | 2,893 | (s) |
| Residual Fuel Oil | 1,009 | (s) | 997 | -6 | 944 | (s) | 951 | -3 | 866 | (s) | 881 | (s) |
| **Imports** | | | | | | | | | | | | |
| Crude Oil | 4,619 | 78 | 4,692 | 49 | 4,788 | 125 | 5,126 | 36 | 5,234 | 72 | 5,055 | 182 |
| Finished Motor Gasoline | 324 | 0 | 365 | 13 | 318 | 0 | 349 | 0 | 415 | 0 | 424 | 0 |
| Naphtha-Type Jet Fuel | 3 | 0 | 3 | 0 | 2 | 0 | 3 | 0 | 4 | 0 | 3 | 0 |
| Kerosene-Type Jet Fuel | 80 | 0 | 64 | 4 | 95 | 0 | 83 | -2 | 101 | 3 | 71 | 4 |
| Distillate Fuel Oil | 355 | 7 | 330 | 8 | 243 | -2 | 208 | (s) | 228 | 7 | 209 | 7 |
| Residual Fuel Oil | 737 | 22 | 792 | 30 | 610 | 14 | 465 | 9 | 423 | (s) | 349 | -27 |
| Other Products | 556 | 3 | 503 | 6 | 506 | 15 | 611 | 15 | 647 | 1 | 629 | 18 |
| Stocks (Thousand Barrels) | | | | | | | | | | | | |
| Crude Oil | 345,479 | 165 | 347,835 | 188 | 353,625 | 328 | 357,131 | 237 | 357,724 | 1,819 | 359,001 | -156 |
| Unfinished Oils | 95,338 | 0 | 97,786 | 41 | 102,134 | 4 | 102,847 | 0 | 112,069 | -2 | 114,952 | 0 |
| LPG's | 80,741 | -1,230 | 70,191 | 255 | 68,808 | 173 | 79,671 | 39 | 89,992 | 273 | 99,988 | 57 |
| Total Motor Gasoline | 239,464 | 21 | 240,661 | -59 | 231,258 | -72 | 225,956 | 262 | 225,644 | 0 | 208,969 | -33 |
| Naphtha-Type Jet Fuel | 8,366 | -760 | 6,731 | -681 | 7,156 | -524 | 6,713 | -442 | 7,397 | -568 | 6,750 | -13 |
| Kerosene-Type Jet Fuel | 37,912 | 70 | 36,889 | 15 | 39,548 | -3 | 39,270 | -42 | 39,392 | 79 | 38,990 | 25 |
| Distillate Fuel Oil | 127,155 | 205 | 109,640 | -58 | 89,312 | -233 | 94,290 | -176 | 104,452 | -463 | 110,662 | -436 |
| Residual Fuel Oil | 46,628 | -55 | 45,465 | 26 | 44,057 | 4 | 43,245 | -76 | 45,746 | 591 | 42,123 | 9 |
| **Product Supplied** | | | | | | | | | | | | |
| LPG's | 2,069 | 53 | 1,982 | -51 | 1,710 | 15 | 1,339 | 12 | 1,350 | -5 | 1,343 | 13 |
| Finished Motor Gasoline | 6,679 | 8 | 7,004 | 15 | 7,265 | 20 | 7,384 | -6 | 7,269 | 11 | 7,838 | -3 |
| Naphtha-Type Jet Fuel | 173 | 25 | 237 | -3 | 197 | -3 | 221 | -3 | 208 | 4 | 233 | -19 |
| Kerosene-Type Jet Fuel | 1,360 | -1 | 1,270 | 7 | 1,200 | 1 | 1,167 | -1 | 1,153 | -1 | 1,202 | 6 |
| Distillate Fuel Oil | 3,517 | (s) | 3,511 | 9 | 3,544 | -6 | 2,870 | -2 | 2,757 | 16 | 2,820 | 6 |
| Residual Fuel Oil | 1,578 | 24 | 1,601 | 22 | 1,434 | 14 | 1,272 | 9 | 945 | -21 | 1,102 | -8 |
| Major Products Supplied | 15,376 | 109 | 15,605 | -1 | 15,350 | 41 | 14,253 | 9 | 13,682 | 4 | 14,538 | -4 |

Note: Volumes indicate cumulative changes resulting from resubmissions received for that month as of the date of this publication.
(s) = Less than 500 barrels per day.

This table contains information on revisions to published statistics caused by resubmission of respondent survey forms. The table shows the published value in the *Petroleum Supply Monthly* (PSM) and the cumulative difference resulting from resubmissions for the major product series. The official published petroleum supply statistics are not changed to reflect revisions until publication of the *Petroleum Supply Annual* (PSA), except in cases of catastrophic error.

This table is provided as a service to analysts who need to know the latest available statistics. It should be used with caution because resubmissions are received on an irregular basis and the impact on published data can change from month to month. In some cases, the pattern of revision caused by resubmissions during the year is a poor indicator of final statistics that will be published in the PSA.

## Table C1. Impact of Resubmissions on Major Series, 1988 (Continued)
(Thousand Barrels per Day, Except Where Noted)

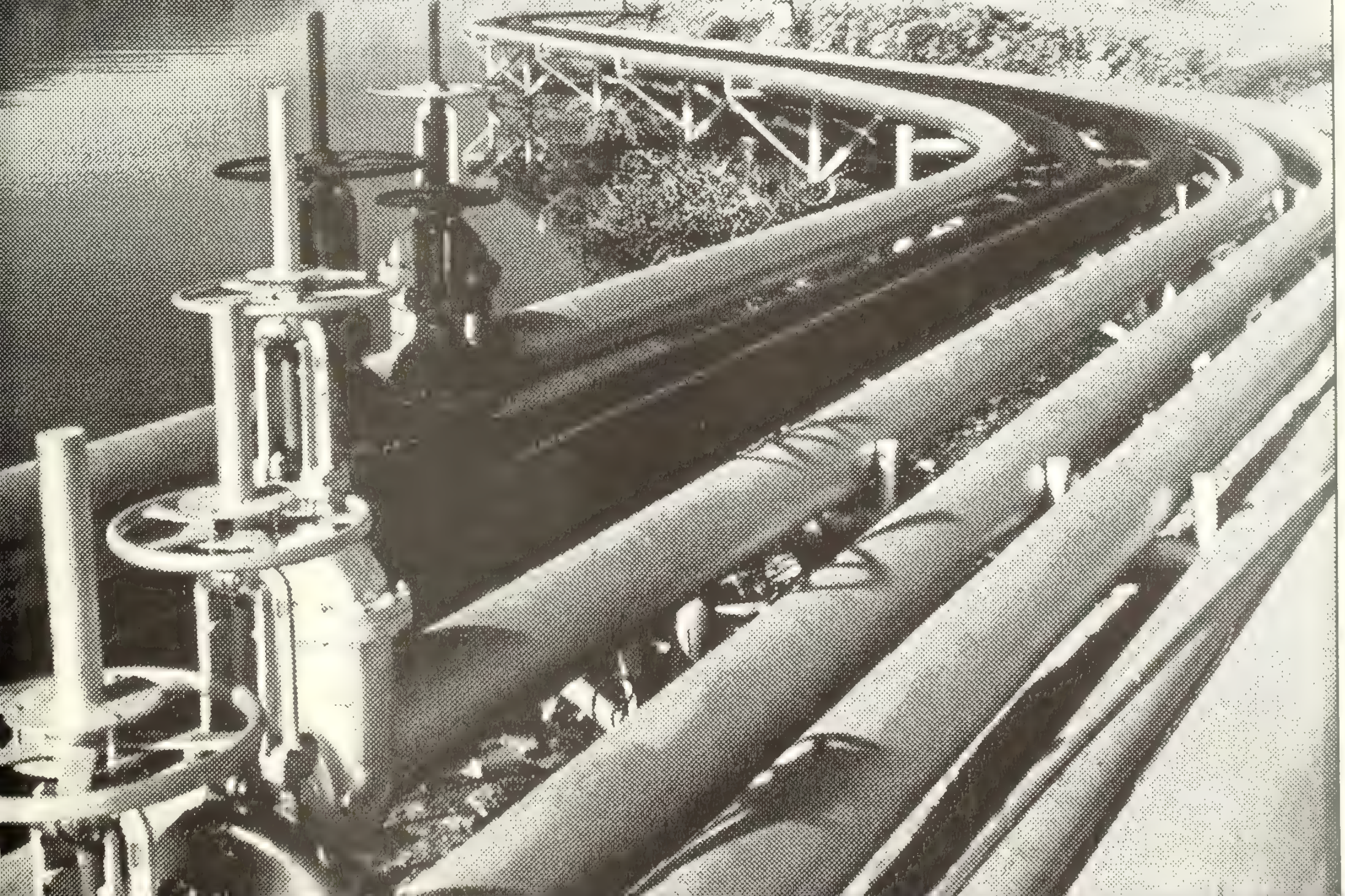
| | July | | August | | September | | October | | November | | December | | Year to Date |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Product | PSM Value | Difference | PSM Value | Difference | PSM Value | Difference | PSM Value | Difference | PSM Value | Difference | PSM Value | Difference | Avg Difference |
| **Inputs** | | | | | | | | | | | | | |
| Crude Oil | 13,663 | 1 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1 |
| LPG's | 228 | 0 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0 |
| **Production** | | | | | | | | | | | | | |
| LPG's | 1,831 | 3 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 7 |
| Finished Motor Gasoline | 7,159 | 0 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 4 |
| Naphtha-Type Jet Fuel | 209 | (s) | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | (s) |
| Kerosene-Type Jet Fuel | 1,155 | (s) | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | (s) |
| Kerosene | 64 | 0 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | (s) |
| Distillate Fuel Oil | 2,783 | 1 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -2 |
| Residual Fuel Oil | 913 | (s) | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -1 |
| **Imports** | | | | | | | | | | | | | |
| Crude Oil | 5,006 | 0 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 77 |
| Finished Motor Gasoline | 461 | 0 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1 |
| Naphtha-Type Jet Fuel | 3 | 0 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0 |
| Kerosene-Type Jet Fuel | 78 | 0 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1 |
| Distillate Fuel Oil | 205 | 0 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 3 |
| Residual Fuel Oil | 436 | 9 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 8 |
| Other Products | 571 | 0 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 8 |
| **Stocks (Thousand Barrels)** | | | | | | | | | | | | | |
| Crude Oil | 349,330 | -92 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 355 |
| Unfinished Oils | 113,600 | 0 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 6 |
| LPG's | 111,906 | 178 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -36 |
| Total Motor Gasoline | 213,757 | 656 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 110 |
| Naphtha-Type Jet Fuel | 6,710 | 1 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -426 |
| Kerosene-Type Jet Fuel | 40,297 | -6 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 19 |
| Distillate Fuel Oil | 119,434 | 96 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -152 |
| Residual Fuel Oil | 41,072 | 8 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 72 |
| **Product Supplied** | | | | | | | | | | | | | |
| LPG's | 1,416 | -1 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 5 |
| Finished Motor Gasoline | 7,473 | -22 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 3 |
| Naphtha-Type Jet Fuel | 213 | (s) | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | (s) |
| Kerosene-Type Jet Fuel | 1,187 | 1 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1 |
| Distillate Fuel Oil | 2,647 | -16 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1 |
| Residual Fuel Oil | 1,177 | 9 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 7 |
| Major Products Supplied | 14,113 | -29 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 18 |

Note: Volumes indicate cumulative changes resulting from resubmissions received for that month as of the date of this publication.
(s) = Less than 500 barrels per day.

This table contains information on revisions to published statistics caused by resubmission of respondent survey forms. The table shows the published value in the *Petroleum Supply Monthly* (PSM) and the cumulative difference resulting from resubmissions for the major product series. The official published petroleum supply statistics are not changed to reflect revisions until publication of the *Petroleum Supply Annual* (PSA), except in cases of catastrophic error.

This table is provided as a service to analysts who need to know the latest available statistics. It should be used with caution because resubmissions are received on an irregular basis and the impact on published data can change from month to month. In some cases, the pattern of revision caused by resubmissions during the year is a poor indicator of final statistics that will be published in the PSA.

# Glossary



# Definitions of Petroleum Products and Other Terms

***Alcohol.*** The family name of a group of organic chemical compounds composed of carbon, hydrogen, and oxygen. The series of molecules vary in chain length and are composed of a hydrocarbon plus a hydroxyl group; CH-(CH)n-OH (e.g., methanol, ethanol, and tertiary butyl alcohol (TBA)).

***Alkylation.*** A refining process for chemically combining sobutane with olefin hydrocarbons (e.g., propylene, butyene) through the control of temperature and pressure in the presence of an acid catalyst, usually sulfuric acid or hydrofluoric acid. The product, alkylate, an isoparaffin, has high octane value and is blended with motor and aviation gasoline to improve the antiknock value of the fuel.

***API Gravity.*** An arbitrary scale expressing the gravity or density of liquid petroleum products. The measuring scale s calibrated in terms of degrees API; it may be calculated in erms of the following formula:

$$\text{Degrees API} = \frac{141.5}{sp.gr.60\,^\circ F/60\,^\circ F} - 131.5$$

***Aromatics.*** Hydrocarbons characterized by unsaturated ring structures of carbon atoms. Commercial petroleum aromatics are benzene, toluene, and xylene (BTX).

***Asphalt.*** A dark-brown-to-black cement-like material containing bitumens as the predominant constituents, obtained by petroleum processing. The definition includes crude asphalt as well as the following finished products: cements, fluxes, the asphalt content of emulsions (exclusive of water), and petroleum distillates blended with asphalt to make cutback asphalts. The conversion factor for asphalt is 5.5 barrels of 42 U.S. gallons per short ton.

***ASTM.*** The acronym for the American Society for Testing and Materials.

***Aviation Gasoline (Finished).*** All special grades of gasoline for use in aviation reciprocating engines, as given in ASTM Specification D910 and Military Specification MIL-G-5572. Excludes blending components which will be used in blending or compounding into finished aviation gasoline.

***Aviation Gasoline Blending Components.*** Naphthas which will be used for blending or compounding into finished aviation gasoline (e.g., straight-run gasoline, alkylate, and reformate). Excludes oxygenates (alcohols, ethers), butane, and pentanes plus.

***Barrel.*** A volumetric unit of measure for crude oil and petroleum products equivalent to 42 U.S. gallons. This measure is used in most statistical reports. Factors for converting petroleum coke, asphalt, still gas and wax to barrels are given in the definitions of these products.

***Barrels Per Calendar Day.*** The maximum number of barrels of input that can be processed during a 24-hour period after making allowances for the following limitations:

> the capability of downstream facilities to absorb the output of crude oil processing facilities of a given refinery. No reduction is made when a planned distribution of intermediate streams through other than downstream facilities is part of a refinery's normal operation;
>
> the types and grades of inputs to be processed;
>
> the types and grades of products expected to be manufactured;
>
> the environmental constraints associated with refinery operations;
>
> the reduction of capacity for scheduled downtime such as routine inspection, mechanical problems, maintenance, repairs, and turnaround; and
>
> the reduction of capacity for unscheduled downtime such as mechanical problems, repairs, and slowdowns.

***Barrels Per Stream Day.*** The amount a unit can process running at full capacity under optimal crude oil and product slate conditions.

***Benzene.*** An aromatic hydrocarbon, ($C_6H_6$), present to a minor degree in most crude oils. Some important products manufactured from benzene are: styrene, phenol, nylon, aniline, and synthetic detergents.

***Butane.*** A normally gaseous straight-chain or branch-chain hydrocarbon, (C4H10). It is extracted from natural gas or refinery gas streams. It includes isobutane and normal butane and is designated in ASTM Specification D1835 and Gas Processors Association Specifications for commercial butane.

> ***Isobutane.*** A normally gaseous branch-chain hydrocarbon, (C4H10). It is a colorless paraffinic gas that boils at a temperature of 10.9 degrees F. It is extracted from natural gas or refinery gas streams.
>
> ***Normal Butane.*** A normally gaseous straight-chain hydrocarbon, (C4H10). It is a colorless paraffinic gas that boils at a temperature of 31.1 degrees F. It is extracted from natural gas or refinery gas streams.

***Butylene.*** An olefinic hydrocarbon, (C4H8), recovered from refinery processes.

***Catalytic Cracking.*** The refining process of breaking down the larger, heavier, and more complex hydrocarbon molecules into simpler and lighter molecules. Catalytic cracking is accomplished by the use of a catalytic agent and is an effective process for increasing the yield of gasoline from crude oil. Catalytic cracking processes fresh feeds and recycled feeds.

> ***Fresh Feeds.*** Crude oil or petroleum distillates which are being fed to processing units for the first time.
>
> ***Recycled Feeds.*** Feeds that are continuously fed back for additional processing.

***Catalytic Hydrocracking.*** A refining process that uses hydrogen and catalysts with relatively low temperatures and high pressures for converting middle boiling or residual material to high-octane gasoline, reformer charge stock, jet fuel and/or high grade fuel oil. The process uses one or more catalysts, depending upon product output, and can handle high sulfur feedstocks without prior desulfurization.

***Catalytic Hydrotreating.*** A refining process for treating petroleum fractions from atmospheric or vacuum distillation units (e.g., naphthas, middle distillates, reformer feeds, residual fuel oil, and heavy gas oil) and other petroleum (e.g., cat cracked naphtha, coker naphtha, gas oil, etc.) in the presence of catalysts and substantial quantities of hydrogen. Hydrotreating includes desulfurization, removal of substances (e.g., nitrogen compounds) that deactivate catalysts, conversion of olefins to paraffins to reduce gum formation in gasoline, and other processes to upgrade the quality of the fractions.

***Catalytic Reforming.*** A refining process using controlled heat and pressure with catalysts to rearrange certain hydrocarbon molecules, thereby converting paraffinic and naphthenic type hydrocarbons (e.g., low-octane gasoline boiling range fractions) into petrochemical feedstocks and higher octane stocks suitable for blending into finished gasoline. Catalytic reforming is reported in two categories. They are:

> ***Low Pressure.*** A processing unit operating at less than 225 pounds per square inch gauge (PSIG) measured at the outlet separator.
>
> ***High Pressure.*** A processing unit operating at either equal to or greater than 225 pounds per square inch gauge (PSIG) measured at the outlet separator.

***Charge Capacity.*** The input (feed) capacity of the refinery processing facilities.

***Coal.*** A generic term applied to carbonaceous rocks that were formed by the partial or complete decomposition of vegetation. These stratified carbonaceous rocks are either solid or brittle and are highly combustible. Includes lignite, bituminous coal, and anthracite which conform to ASTM Specification D388.

***Crude Distillation.*** The refining process of separating crude oil components at atmospheric pressure by heating to temperatures of about 600 degrees F to 750 degrees F (depending on the nature of the crude oil and desired products) and subsequent condensing of the fractions by cooling.

***Crude Oil (including Lease Condensate).*** A mixture of hydrocarbons that existed in liquid phase in underground reservoirs and remains liquid at atmospheric pressure after passing through surface-separating facilities. Included are lease condensate and liquid hydrocarbons produced from tar sands, gilsonite, and oil shale. Drip gases are also included, but topped crude oil (residual oil) and other unfinished oils are excluded. Liquids produced at natural gas processing plants and mixed with crude oil are likewise excluded where identifiable. Crude oil is considered as either domestic or foreign, according to the following:

> ***Domestic.*** Crude oil produced in the United States or from its "outer continental shelf" as defined in 43 USC 1331.
>
> ***Foreign.*** Crude oil produced outside the United States. Imported Athabasca hydrocarbons are included.

***Delayed Coking.*** A process by which heavier crude oil fractions can be thermally decomposed under conditions of elevated temperatures and pressure to produce a mixture of lighter oils and petroleum coke. The light oils can be processed further in other refinery units to meet product specifications. The coke can be used either as a fuel or in other applications such as the manufacturing of steel or aluminum.

***Distillate Fuel Oil.*** A general classification for one of the petroleum fractions produced in conventional distillation operations. It is used primarily for space heating, on-and-off-highway diesel engine fuel including railroad engine fuel and fuel for agricultural machinery), and electric power generation. Included are products known as No. 1, No. 2, and No. 4 fuel oils; No. 1, No. 2, and No. 4 diesel fuels.

> ***No. 1 Fuel Oil .*** A light distillate fuel oil intended for use in vaporizing pot-type burners. ASTM Specification D396 specifies for this grade maximum distillation temperatures of 400 degrees F at the 10-percent recovery point and 550 degrees F at the 90-percent point, and kinematic viscosities between 1.4 and 2.2 centistokes at 100 degrees F.
>
> ***No. 2 Fuel Oil.*** A distillate fuel oil for use in atomizing-type burners for domestic heating or for moderate capacity commercial-industrial burner units. ASTM Specification D396 designates minimum and maximum distillation temperatures at the 90-percent recovery point of 540 degrees F and 640 degrees F, and kinematic viscosities between 2.0 and 3.6 centistokes at 100 degrees F.
>
> ***No. 1 and No. 2 Diesel Fuel Oils.*** Distillate fuel oils used in compression-ignition engines, as designated in the ASTM Specification D975:
>
> > ***No. 1-D.*** A volatile distillate fuel oil with a maximum distillation temperature of 550 degrees F at the 90-percent recovery point for use in high-speed diesel engines generally operated under variations in speed and load. Includes type C-B diesel fuel used for city buses and similar operations. Properties are defined in ASTM Specification D975.
> >
> > ***No. 2-D.*** A gas oil type distillate of lower volatility with minimum and maximum distillation temperatures at the 90-percent recovery point of 540 and 640 degrees F for use in high-speed diesel engines generally operated under uniform speed and load conditions. Includes Type R-R diesel fuel used for railroad locomotive engines, and Type T-T for diesel-engine trucks. Properties are defined in ASTM Specification D975.
>
> ***No. 4 Fuel Oil.*** A fuel oil for commercial burner installations not equipped with preheating facilities. It is used extensively in industrial plants. This grade is a blend of distillate fuel oil and residual fuel oil stocks that conforms to ASTM Specification D396 or Federal Specification VV-F-815C; with minimum and maximum kinematic viscosities between 5.8 and 26.4 centistokes at 100 degrees F. Also included is No. 4-D, a fuel oil for low and medium-speed diesel engines that conforms to ASTM Specification D975.

***Eastern Hemisphere.*** That half of the earth east of the Atlantic Ocean which includes Europe, Asia, Africa and Australia. The Hawaiian Foreign Trade Zone is in this hemisphere.

***Electricity (Purchased).*** Electricity purchased for refinery operations that is not produced within the refinery complex.

***Ethane.*** A normally gaseous straight-chain hydrocarbon, (C2H6). It is a colorless paraffinic gas that boils at a temperature of -127.48 degrees F. It is extracted from natural gas and refinery gas streams.

***Ether.*** A generic term applied to a group of organic chemical compounds composed of carbon, hydrogen, and oxygen, characterized by an oxygen atom attached to two carbon atoms (e.g., methyl tertiary butyl ether).

***Ethylene.*** An olefinic hydrocarbon, (C2H4), recovered from refinery processes or petrochemical processes.

***Exports.*** Shipments of goods from the 50 States and the District of Columbia to foreign countries, Puerto Rico, the Virgin Islands and other U.S. possessions and territories.

***Field Production.*** Represents crude oil production on leases, natural gas liquids production at natural gas processing plants, and new supply of other hydrocarbons and alcohol.

***Flexicoking.*** A thermal cracking process which converts heavy hydrocarbons such as crude oil, tar sands bitumen, and distillation residues into light hydrocarbons. Feedstocks can be any pumpable hydrocarbons including those containing high concentrations of sulfur and metals.

***Fluid Coking.*** A thermal cracking process utilizing the fluidized-solids technique to remove carbon (coke) for continuous conversion of heavy, low-grade oils into lighter products.

***Fuels Solvent Deasphalting.*** A refining process for removing asphalt compounds from petroleum fractions, such as reduced crude oil. The recovered stream from this process is used to produce fuel products.

***Gas Oil.*** A liquid petroleum distillate having a viscosity intermediate between that of kerosene and lubricating oil. It derives its name from having originally been used in the manufacture of illuminating gas. It is now used to produce distillate fuel oils and gasoline.

***Gasohol. See Motor Gasoline (Finished).***

***Gasoline Blending Components.*** Naphthas which will be used for blending or compounding into finished aviation or motor gasoline (e.g., straight-run gasoline, alkylate, and reformate). Excludes oxygenates (alcohols, ethers), butane, and pentanes plus.

***Heavy Gas Oil.*** Petroleum distillates with an approximate boiling range from 651 degrees F to 1000 degrees F.

***Hydrogen.*** The lightest of all gases, occurring chiefly in combination with oxygen in water; also in acids, bases, alcohols, petroleum, and other hydrocarbons.

***Idle Capacity.*** The component of operable capacity that is not in operation and not under active repair, but capable of being placed in operation within 30 days; and capacity not in operation but under active repair that can be completed within 90 days.

***Imported Crude Oil Burned As Fuel.*** The amount of foreign crude oil burned as a fuel oil, usually as residual fuel oil, without being processed as such. Imported crude oil burned as fuel includes lease condensate and liquid hydrocarbons produced from tar sand oil, gilsonite, and shale oil.

***Imports.*** Receipts of goods into the 50 States and the District of Columbia from foreign countries, Puerto Rico, the Virgin Islands, and other U.S. possessions and territories.

***Isobutane. See Butane.***

***Isohexane.*** A saturated branch-chain hydrocarbon, ($C_6H_{14}$). It is a colorless liquid that boils at a temperature of 156.2 degrees F.

***Isomerization.*** A refining process which alters the fundamental arrangement of atoms in the molecule without adding or removing anything from the original material. Used to convert normal butane into isobutane, (C4), an alkylation process feedstock, and normal pentane and hexane into isopentane, (C5), and isohexane, (C6), high-octane gasoline components.

***Isopentane. See Natural Gasoline and Isopentane.***

***Kerosene.*** A petroleum distillate that has a maximum distillation temperature of 401 degrees F at the 10-percent recovery point, a final boiling point of 572 degrees F, and a minimum flash point of 100 degrees F. Included are the two grades designated in ASTM D3699: No. 1-K and No. 2-K, and all grades of kerosene called range or stove oil. Kerosene is used in space heaters, cook stoves, and water heaters and is suitable for use as an illuminant when burned in wick lamps.

***Kerosene-type Jet Fuel.*** A quality kerosene product with a maximum distillation temperature of 400 degrees F at the 10-percent recovery point and a final maximum boiling point of 572 degrees F. The fuel is designated in ASTM Specification D1655 and Military Specification MIL-T-5624L (Grades JP-5 and JP-8). A relatively low-freezing point distillate of the kerosene type used primarily for commercial turbojet and turboprop aircraft engines.

***Lease Condensate.*** A natural gas liquid recovered from gas well gas (associated and non-associated) in lease separators or natural gas field facilities. Lease condensate consists primarily of pentanes and heavier hydrocarbons.

***Light Gas Oils.*** Liquid petroleum distillates heavier than naphtha, with an approximate boiling range from 401 degrees F to 650 degrees F.

***Liquefied Petroleum Gases (LPG).*** Ethane, ethylene, propane, propylene, normal butane, butylene, and isobutane produced at refineries or natural gas processing plants, including plants that fractionate raw natural gas plant liquids.

***Liquefied Refinery Gases (LRG).*** Liquefied petroleum gases fractionated from refinery or still gases. Through compression and/or refrigeration, they are retained in the liquid state. The reported categories are ethane/ethylene, propane/propylene, normal butane butylene, and isobutane. Excludes still gas.

***Lubricating Oils.*** A substance used to reduce friction between bearing surfaces. Petroleum lubricants may be produced either from distillates or residues. Other substances may be added to impart or improve certain required properties. Do not include byproducts of lubricating oil refining such as aromatic extracts derived from solvent extraction or tars derived from deasphalting. "Lubricants"

includes all grades of lubricating oils from spindle oil to cylinder oil and those used in greases. The three categories include:

*Bright Stock.* A refined, high viscosity lubricating oil base stock that is usually made from a residuum by a treatment such as deasphalting, acid treatment, or solvent extraction.

*Neutral.* A distillate lubricating oil base stock with a viscosity that is usually not above 550 Saybolt Universal Seconds (SUS) at 100 degrees F. A product of hydrotreating, acid treatment, or solvent extraction.

*Other.* A lubricating oil base stock used in finished lubricating oils and greases, including black, coastal, and red oils.

*Middle Distillates.* A general classification that includes distillate fuel oil and kerosene.

*Miscellaneous Products.* Includes all finished products not classified elsewhere (e.g., petrolatum, lube refining byproducts (aromatic extracts and tars), absorption oils, ram-jet fuel, petroleum rocket fuels, synthetic natural gas feedstocks, speciality oils, and medicinal oils).

*Motor Gasoline (Finished).* A complex mixture of relatively volatile hydrocarbons, with or without small quantities of additives, that have been blended to form a fuel suitable for use in spark-ignition engines. Motor gasoline, as given in ASTM Specification D439 or Federal Specification VV-G-1690B, include a range in distillation temperatures from 122 to 158 degrees F at the 10-percent recovery point and from 365 to 374 degrees F at the 90-percent recovery point. The Reid Vapor Pressure ranges from 9 to 15 psi. "Motor gasoline" includes finished leaded gasoline, finished unleaded gasoline, and gasohol. Blendstock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

*Finished Leaded Gasoline.* Contains more than 0.05 gram of lead per gallon or more than 0.005 gram of phosphorus per gallon. Premium and regular grades are included, depending on the octane rating. Includes leaded gasohol. Blendstock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

*Finished Unleaded Gasoline.* Contains not more than 0.05 gram of lead per gallon and not more than 0.005 gram of phosphorus per gallon. Premium and regular grades are included, depending on the octane rating. Includes unleaded gasohol. Blendstock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

*Gasohol.* A blend of finished motor gasoline (leaded or unleaded) and alcohol (generally ethanol but sometimes methanol), limited to 10 percent by volume of alcohol.

*Motor Gasoline Blending Components.* Naphthas which will be used for blending or compounding into finished motor gasoline (e.g. straight-run gasoline, alkylate, and reformate). Excludes oxygenates (alcohols, ethers), butane, and pentanes plus.

*Naphtha.* A generic term applied to a petroleum fraction with an approximate boiling range between 122 and 400 degrees F.

*Naphtha-type Jet Fuel.* A fuel in the heavy naphtha boiling range. ASTM Specification D1655 specifies for this fuel maximum distillation temperatures of 290 degrees F at the 20-percent recovery point and 470 degrees F at the 90-percent point, meeting Military Specification MIL-T-5624L (Grade JP-4). JP-4 is used for turbojet and turboprop aircraft engines, primarily by the military. Excludes ram-jet and petroleum rocket fuels.

*Natural Gas.* A mixture of hydrocarbons and small quantities of various nonhydrocarbons existing in the gaseous phase or in solution with crude oil in underground reservoirs.

*Natural Gas Field Facility.* A field facility designed to process natural gas produced from more than one lease for the purpose of recovering condensate from a stream of natural gas; however, some field facilities are designed to recover propane, normal butane, pentanes plus, etc., and to control the quality of natural gas to be marketed.

*Natural Gas Plant Liquids.* Natural gas liquids recovered from natural gas in gas processing plants, and in some situations, from natural gas field facilities. Natural gas liquids extracted by fractionators are also included. These liquids are defined according to the published specifications of the Gas Processors Association and the American Society for Testing and Materials and are classified as follows: ethane, propane, normal butane, isobutane, pentanes plus, and other products from natural gas processing plants (i.e., products meeting the standards for finished petroleum products produced at natural gas processing plants, such as finished motor gasoline, finished aviation gasoline, special naphthas, kerosene, distillate fuel oil, and miscellaneous products).

***Natural Gas Processing Plant.*** A gas processing plant is a facility designed (1) to achieve the recovery of natural gas liquids from the stream of natural gas which may or may not have been processed through lease separators and field facilities, and (2) to control the quality of the natural gas to be marketed. Cycling plants are classified as gas processing plants.

***Natural Gasoline and Isopentane.*** A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas, that meets vapor pressure, end-point, and other specifications for natural gasoline set by the Gas Processors Association. Includes isopentane which is a saturated branch-chain hydrocarbon, (C5H12), obtained by fractionation of natural gasoline or isomerization of normal pentane.

***Normal Butane. See Butane.***

***OPEC.*** The acronym for the Organization of Petroleum Exporting Countries, that have organized for the purpose of negotiating with oil companies on matters of oil production, prices and future concession rights. Current members are Algeria, Ecuador, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela.

***Operable Capacity.*** The amount of capacity that, at the beginning of the period, is in operation; not in operation and not under active repair, but capable of being placed in operation within 30 days; or not in operation but under active repair that can be completed within 90 days. Operable capacity is the sum of the operating and idle capacity and is measured in barrels per calendar day or barrels per stream day.

***Operating Capacity.*** The component of operable capacity that is in operation at the beginning of the period.

***Other Hydrocarbons.*** Materials received by a refinery and consumed as a raw material. Includes hydrogen, coal tar derivatives, gilsonite, and natural gas received by the refinery for reforming into hydrogen. Natural gas to be used as fuel is excluded.

***Oxygenates.*** Oxygenates include both alcohols and ethers used as octane boosting additives for gasoline (e.g., methyl tertiary butyl ether).

***Pentanes Plus.*** A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas. Includes isopentane, natural gasoline, and plant condensate.

***Petrochemical Feedstocks.*** Chemical feedstocks derived from petroleum principally for the manufacture of chemicals, synthetic rubber, and a variety of plastics. The categories reported are "Naphtha-Less than 400 degrees F" and "Other oils over 400 degrees F."

> ***Naphtha-Less Than 400 Degrees F.*** A naphtha with a boiling range of less than 400 degrees F that is intended for use as a petrochemical feedstock.
>
> ***Other Oils-Over 400 Degrees F.*** Oils with a boiling range of over 400 degrees F that is intended for use as a petrochemical feedstock.

***Petroleum Coke.*** A residue, the final product of the condensation process in cracking. This product is reported as marketable coke or catalyst coke. The conversion factor is 5 barrels of 42 U.S. gallons per short ton.

> ***Marketable Coke.*** Those grades of coke produced in delayed or fluid cokers which may be recovered as relatively pure carbon. This "green" coke may be sold as is or further purified by calcining.
>
> ***Catalyst Coke.*** In many catalytic operations (e.g., catalytic cracking) carbon is deposited on the catalyst, thus deactivating the catalyst. The catalyst is reactivated by burning off the carbon, which is used as a fuel in the refining process. This carbon or coke is not recoverable in a concentrated form.

***Petroleum Products.*** Petroleum products are obtained from the processing of crude oil (including lease condensate), natural gas, and other hydrocarbon compounds. Petroleum products include unfinished oils, liquefied petroleum gases, pentanes plus, aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, petrochemical feedstocks, special naphthas, lubricants, waxes, petroleum coke, asphalt, road oil, still gas, and miscellaneous products.

***Plant Condensate.*** One of the natural gas liquids, mostly pentanes and heavier hydrocarbons, recovered and separated as liquids at gas inlet separators or scrubbers in processing plants.

***Primary Stocks.*** Stocks of crude oil or petroleum products held in storage at (or in) leases, refineries, natural gas processing plant pipelines, tankfarms, and bulk terminals that can store at least 50,000 barrels of petroleum products or that can receive petroleum products by tanker, barge, or pipeline. Crude oil that is in-transit by water from Alaska, or that is stored on Federal leases or in the Strategic Petroleum Reserve is included. Primary Stocks exclude stocks of foreign origin that are held in bonded warehouse storage.

*Production Capacity.* The amount of product that can be produced from processing facilities.

*Propane.* A normally gaseous straight-chain hydrocarbon, (C3H8). It is a colorless paraffinic gas that boils at a temperature of -43.67 degrees F. It is extracted from natural gas or refinery gas streams. It includes all products designated in ASTM Specification D1835 and Gas Processors Association Specifications for commercial propane and HD-5 propane.

*Propylene.* An olefinic hydrocarbon, (C3H6), recovered from refinery processes or petrochemical processes.

*Refinery.* An installation that manufactures finished petroleum products from crude oil, unfinished oils, natural gas liquids, other hydrocarbons, and alcohol.

*Residual Fuel Oil.* The topped crude of refinery operations which includes No. 5 and No. 6 fuel oils as defined in ASTM Specification D396 and Federal Specification VV-F-815C, Navy Special fuel oil as defined in Military Specification MIL-F-859E including Amendment 2 (NATO Symbol F-77), and Bunker C fuel oil. Residual fuel oil is used for the production of electric power, space heating, vessel bunkering, and various industrial purposes. Imports of residual fuel oil include "Imported Crude Oil Burned as Fuel."

*Residuum.* Residue from crude oil after distilling off all but the heaviest components, with a boiling range greater than 1000 degrees F.

*Road Oil.* Any heavy petroleum oil, including residual asphaltic oil used as a dust pallative and surface treatment on roads and highways. It is generally produced in six grades from 0, the most liquid, to 5, the most viscous.

*Shell Storage Capacity.* The design capacity of a petroleum storage tank and is always greater than or equal to working storage capacity.

*Special Naphthas.* All finished products within the naphtha boiling range that are used as paint thinners, cleaners, or solvents. These products are refined to a specified flash point. Special naphthas include all commercial hexane and cleaning solvents conforming to ASTM Specification D1836 and D484, respectively. Naphthas to be blended or marketed as motor gasoline or aviation gasoline, or that are to be used as petrochemical and synthetic natural gas (SNG) feedstocks are excluded.

*Steam (Purchased).* Steam, purchased for use by a refinery, that was not generated from within the refinery complex.

*Still Gas (Refinery Gas).* Any form or mixture of gases produced in refineries by distillation, cracking, reforming, and other processes. The principal constituents are methane, ethane, ethylene, normal butane, butylene, propane, propylene, etc. Still gas is used as a refinery fuel and a petrochemical feedstock. The conversion factor is 6.000 million Btu per barrel (42 U.S. gallons).

*Strategic Petroleum Reserve (SPR).* Petroleum stocks maintained by the Federal Government for use during periods of major supply interruption.

*Sulfur.* A nonmetallic element of lemon-yellow color, sometimes known as "brimstone."

*Thermal Cracking.* A refining process in which heat and pressure are used to break down, rearrange, or combine hydrocarbon molecules. Thermal cracking includes gas oil, visbreaking, fluid coking, delayed coking, and other thermal cracking processes (e.g., flexicoking). See individual categories for definition.

*Toluene.* An aromatic hydrocarbon, (C6H5CH3), somewhat similar to benzene but of a higher boiling point produced in the coking of coal and also by petroleum refining processes. It is the basis of dyes, explosives, and aromatic compounds. Along with xylene, it is a key component in unleaded gasoline.

*Unfinished Oils.* Includes all oils requiring further processing, except those requiring only mechanical blending. Includes naphthas, kerosene, light and heavy gas oils, and residuum. See individual categories for definition.

*Unfractionated Streams.* Mixtures of unsegregated natural gas liquid components excluding those in plant condensate. This product is extracted from natural gas.

*United States.* The United States is defined as the 50 States and the District of Columbia. U.S. exports include shipments to U.S. territories, and imports include receipts from U.S. territories.

*Vacuum Distillation.* Distillation under reduced pressure (less the atmospheric) which lowers the boiling temperature of the liquid being distilled. This technique with its relatively low temperatures prevents cracking or decomposition of the charge stock.

*Visbreaking.* A thermal process in which heavy atmospheric or vacuum-still bottoms are cracked at moderate temperatures to increase production of distillate products and reduce viscosity of the distillation residues.

***Wax.*** A solid or semi-solid material derived from petroleum distillates or residues by such treatments as chilling, precipitating with a solvent, or de-oiling. It is light-colored, more-or-less translucent crystalline mass, slightly greasy to the touch, consisting of a mixture of solid hydrocarbons in which the paraffin series predominates. Includes all marketable wax whether crude scale or fully refined. The three grades included are microcrystalline, crystalline-fully refined, and crystalline-other. The conversion factor is 280 pounds per 42 U.S. gallons per barrel.

> ***Microcrystalline Wax.*** Wax extracted from certain petroleum residues having a finer and less apparent crystalline structure than paraffin wax and having the following physical characteristics: Penetration at 77 degrees F (D1321)-60 maximum. Viscosity at 210 degrees F in Saybolt Universal Seconds (SUS). (D88)-60 SUS (10.22 centistokes) minimum to 150 SUS (31.8 centistokes) maximum. Oil content (D721)-5 percent minimum.
>
> ***Crystalline-Fully Refined Wax.*** A light-colored paraffin wax having the following characteristics: Viscosity at 210 degrees F (D88)-59.9 SUS (10.18 centistokes) maximum. Oil content (D721)-0.5 percent maximum. Other +20 color, Saybolt minimum.
>
> ***Crystalline-Other Wax.*** A paraffin wax having the following characteristics: Viscosity at 210 degrees F (D88)-59.9 SUS (10.18 centistokes) maximum. Oil content (D721)-0.51 percent minimum to 15 percent maximum.

***Western Hemishpere.*** That half of the earth that includes North and South America and adjacent islands.

***Working Storage Capacity.*** The volume between the maximum safe fill capacity and the quantity below which pump suction is ineffective (bottoms).

***Xylene.*** An aromatic hydrocarbon, (C6H4Y(CH3)2), produced in petroleum refining (cracking) processes. One important use is as a solvent in the manufacture of paints. Along with toluene, it is a key ingredient in unleaded gasoline.

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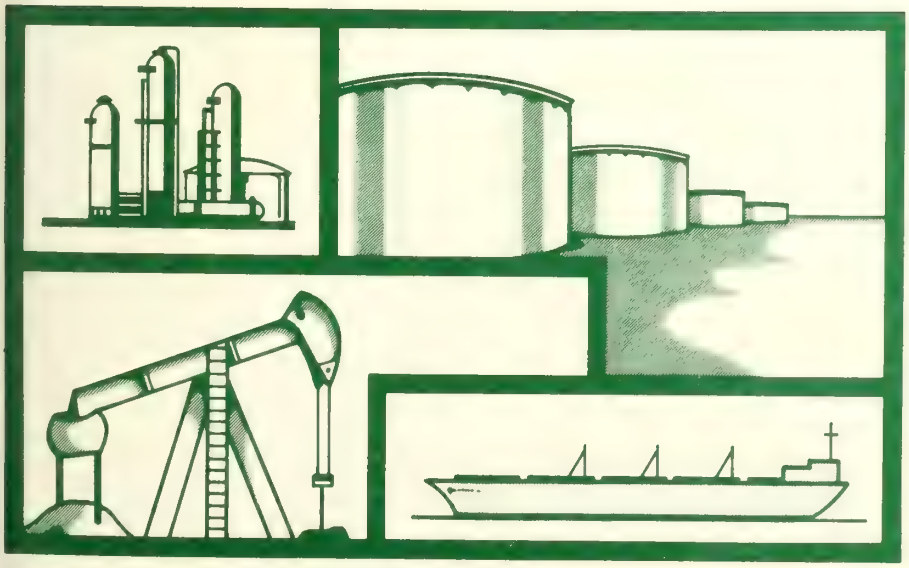
# Petroleum Supply Monthly

October 1988



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# Petroleum Supply Monthly

## October 1988

**Energy Information Administration**
Office of Oil and Gas
U.S. Department of Energy
Washington, DC 20585

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| *Petroleum Supply Monthly* -- Preliminary (1988) | PB88-207501 |
| Oil Imports into the United States and Puerto Rico, Annual -- 1977-1985 | PB87-147781 |
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| Oil Imports into the United States and Puerto Rico, Monthly -- Preliminary (1988) | PB88-207493 |

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| Motor Gasoline Outlook for Summer 1985 | February 1985 |
| Refinery Capacity Trends and Outlook | March 1985 |
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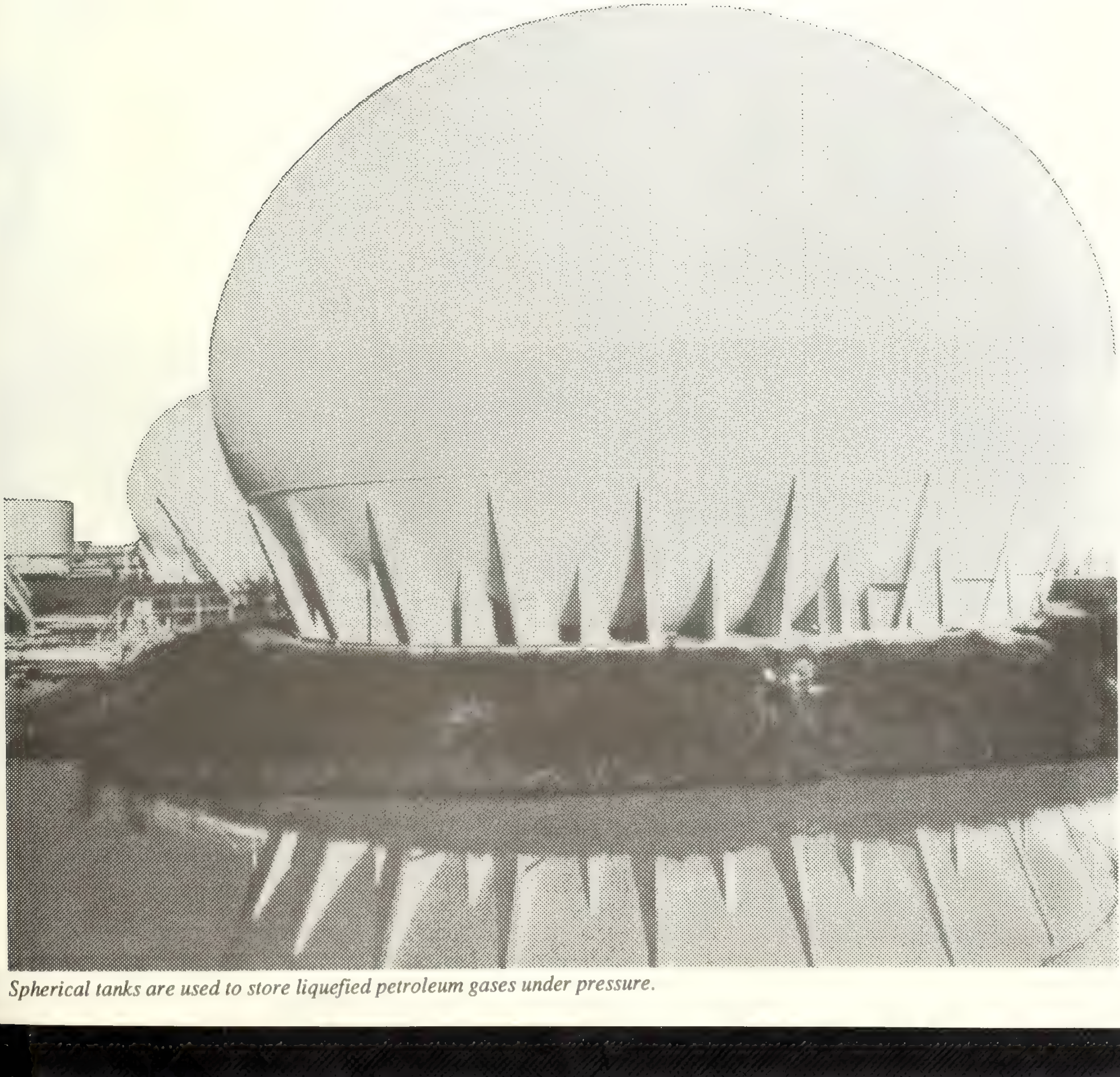
# Highlights



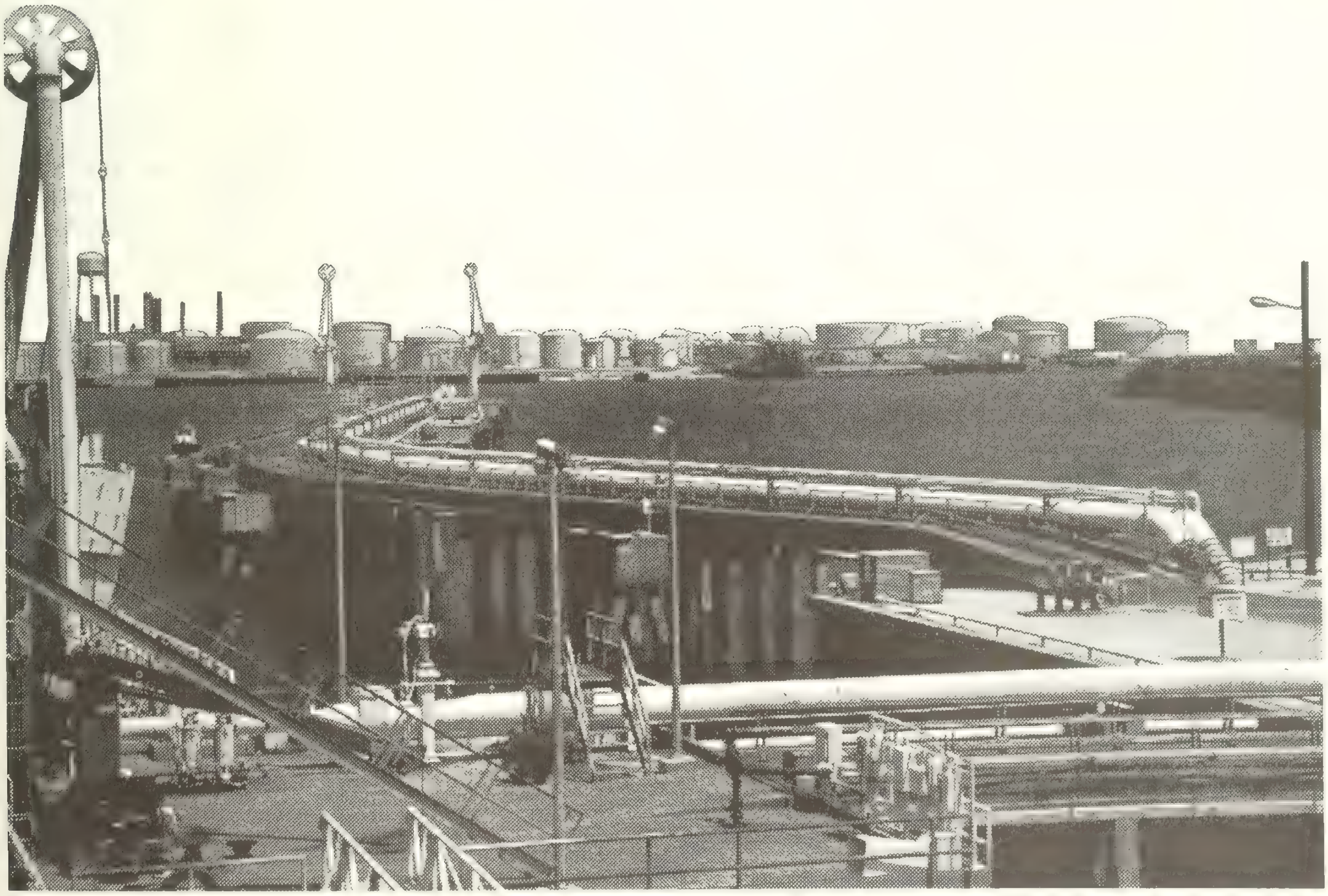
*Spherical tanks are used to store liquefied petroleum gases under pressure.*

# Highlights

Total U.S. demand for petroleum products (measured as product supplied) averaged 17.5 million barrels per day in October 1988, 0.7 million barrels per day above the level for September and 0.5 million barrels per day above the level for October 1987. Total product supplied through the first 10 months of 1988 was 2.4 percent higher than during the same period of 1987. Increased demand for distillate and residual fuel oils together accounted for most of the increase in total product supplied in October 1988.

Other highlights for October 1988 include the following:

- Total product stocks decreased 9.8 million barrels to 734.5 million barrels.
- Crude oil stocks, excluding the Strategic Petroleum Reserve (SPR), rose 11.2 million barrels in October to 339.6 million barrels.
- Crude oil imports, excluding SPR, averaged 5.5 million barrels per day, 0.4 million barrels per day above the level for September. This was the highest monthly level since April, 1980.
- Refinery utilization decreased for the second consecutive month, dropping from 83.7 percent in September to 83.5 percent in October.



*Imports of crude oil (excluding SPR) into the United States increased 0.4 million barrels per day in October to 5.5 million barrels per day. Shown above is the Seaway Dock in Freeport, Texas, an offloading point for crude oil.*

## Table H1. Petroleum Supply Summary, October 1988
(Million Barrels per Day, Except Where Noted)

| Category | 1988 | | | 1987 | Cumulative January Through October | |
|---|---|---|---|---|---|---|
| | October | September | Difference[1] | October | 1988 | 1987 |
| **Products Supplied** | **17.5** | **16.8** | **0.7** | **16.9** | **17.0** | **16.6** |
| Finished Motor Gasoline | 7.3 | 7.3 | -0.1 | 7.3 | 7.3 | 7.2 |
| Distillate Fuel Oil | 3.2 | 2.8 | 0.4 | 3.2 | 3.1 | 2.9 |
| Residual Fuel Oil | 1.3 | 1.1 | 0.2 | 1.1 | 1.3 | 1.3 |
| Liquefied Petroleum Gases | 1.8 | 1.7 | 0.1 | 1.7 | 1.6 | 1.6 |
| Other Petroleum Products[2] | 3.9 | 3.8 | 0.1 | 3.7 | 3.7 | 3.6 |
| Crude Oil | (s) | (s) | (s) | (s) | (s) | (s) |
| **Crude Oil Inputs** | **13.2** | **13.3** | **-0.1** | **12.7** | **13.3** | **12.8** |
| **Refinery Utilization (percent)** | **83.5** | **83.7** | **-0.2** | **82.7** | **84.4** | **83.1** |
| **Imports** | **7.7** | **7.2** | **0.4** | **7.1** | **7.1** | **6.6** |
| **Crude Oil** | **5.5** | **5.2** | **0.4** | **5.1** | **5.0** | **4.6** |
| SPR | (s) | 0.1 | (s) | 0.1 | 0.1 | 0.1 |
| Other | 5.5 | 5.1 | 0.4 | 5.1 | 5.0 | 4.6 |
| **Products** | **2.1** | **2.0** | **0.1** | **1.9** | **2.1** | **2.0** |
| Finished Motor Gasoline | 0.4 | 0.4 | (s) | 0.4 | 0.4 | 0.4 |
| Distillate Fuel Oil | 0.3 | 0.3 | (s) | 0.2 | 0.3 | 0.2 |
| Residual Fuel Oil | 0.5 | 0.6 | (s) | 0.4 | 0.5 | 0.6 |
| Liquefied Petroleum Gases | 0.2 | 0.2 | (s) | 0.2 | 0.2 | 0.2 |
| Other Petroleum Products[2] | 0.7 | 0.6 | 0.1 | 0.7 | 0.7 | 0.6 |
| **Exports** | **0.7** | **0.7** | **0.1** | **0.6** | **0.8** | **0.7** |
| Crude Oil | 0.2 | 0.1 | (s) | 0.1 | 0.2 | 0.1 |
| Products | 0.6 | 0.6 | (s) | 0.6 | 0.6 | 0.6 |
| **Total Net Imports** | **6.9** | **6.5** | **0.4** | **6.4** | **6.3** | **5.9** |
| **Stock Change[3]** | **0.1** | **0.2** | **-0.1** | **0.1** | **0.1** | **0.1** |
| Crude Oil | 0.4 | -0.1 | 0.5 | 0.7 | (s) | 0.2 |
| Products | -0.3 | 0.3 | -0.6 | -0.5 | 0.1 | -0.1 |
| **Total Stocks at End of Period (Million Barrels)** | **1,630.1** | **1,627.4** | **2.7** | **1,610.0** | -- | -- |
| **Crude Oil** | **895.6** | **883.1** | **12.5** | **891.5** | -- | -- |
| SPR | 556.0 | 554.7 | 1.3 | 535.7 | -- | -- |
| Other | 339.6 | 328.4 | 11.2 | 355.9 | -- | -- |
| **Products** | **734.5** | **744.3** | **-9.8** | **718.4** | -- | -- |
| Finished Motor Gasoline | 180.0 | 181.9 | -1.9 | 181.8 | -- | -- |
| Distillate Fuel Oil | 127.9 | 131.0 | -3.0 | 121.0 | -- | -- |
| Residual Fuel Oil | 42.4 | 44.2 | -1.8 | 45.6 | -- | -- |
| Liquefied Petroleum Gases | 119.9 | 121.6 | -1.7 | 112.5 | -- | -- |
| Other Petroleum Products[2] | 264.3 | 265.6 | -1.3 | 257.5 | -- | -- |

---

[1] Difference is equal to volume for current month minus volume for previous month.

[2] Includes pentanes plus, other hydrocarbons and alcohol, unfinished oils, gasoline blending components, and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil, and liquefied petroleum gases.

[3] A negative number indicates a decrease in stocks and a positive number indicates an increase.

(s) = Less than 0.05 million barrels or less than 0.05 percent.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration: *Petroleum Supply Annual*, 1987 (June 1988). Appropriate issues of *Petroleum Supply Monthly*. (See Explanatory Notes 9.1 through 9.6.)

## Product Supplied

Distillate fuel oil demand increased 0.4 million barrels per day in October to 3.2 million barrels per day (Table H1). Cooler than normal weather throughout much of the eastern United States contributed to the large increase in October. For the first 10 months of 1988, distillate demand averaged 3.1 million barrels per day, an increase of 3.6 percent from the comparable period last year. The year-to-date increase in distillate demand in 1988 is largely due to continued growth in the transportation sector.

Demand for residual fuel oil increased 0.2 million barrels per day to 1.3 million barrels per day in October. Part of the strength in residual fuel oil demand this month is the result of fuel switching from natural gas, a reflection of the recently improved competitive position of residual fuel oil in some industrial and utility markets. Unseasonably cool weather during October also contributed to the increase in residual fuel oil demand. Residual fuel oil demand through the first 10 months of 1988 averaged 1.3 million barrels per day, slightly higher than for the comparable period of 1987.

Demand for liquefied petroleum gases (LPG's) during October averaged 1.8 million barrels per day, about 0.1 million barrels per day above the level for September. Ethane provides higher yields than other petrochemical feedstocks in the production of ethylene. Consequently, ethane demand at petrochemical plants remained high in October. Propane demand as a petrochemical feedstock and as a heating fuel increased in October. Year-to-date LPG demand averaged 1.6 million barrels per day, 3.2 percent higher than during the comparable period of 1987. Strong demand for LPG's for heating during the first quarter and sustained high demand at petrochemical plants accounted for most of the increase in LPG demand this year.

Asphalt and road oil demand fell over 0.1 million barrels per day in October to 0.6 million barrels per day, as road construction and maintenance activities slowed. For the first 10 months of 1988, asphalt and road oil demand averaged 0.5 million barrels per day, slightly higher than for the same period of 1987.

Motor gasoline demand in October averaged 7.3 million barrels per day, slightly below the average for September. For the first 10 months of 1988, demand averaged 7.3 million barrels per day, 1.4 percent higher than during the comparable period of 1987. The higher motor gasoline demand in 1988 is attributable to a 4-percent increase in highway travel, as disposable income increased, and the real price of motor gasoline decreased.

Kerosene-type jet fuel demand increased 4.4 percent in October, averaging 1.3 million barrels per day. For the first 10 months of 1988, kerosene-type jet fuel demand averaged 1.2 million barrels per day. This was 4.4 percent higher than for the comparable period of 1987, as air traffic continued to grow.

## Product Stocks

Total ending stocks of petroleum products fell 9.8 million barrels in October to 734.5 million barrels. Inventories for all major products decreased, but distillate fuel oil stocks showed the largest decrease, accounting for 31.0 percent of the total decline. Distillate fuel oil stocks decreased 3.0 million barrels in October to 127.9 million barrels, registering the first decrease since March. However, distillate stock levels were 7.0 million barrels higher than a year ago, when they were unusually low for the beginning of the winter heating season. Both primary and secondary stock levels of distillate fuel oil were higher at the end of October 1988 than they were a year ago.

Finished motor gasoline stocks declined for the second consecutive month and stood at 180.0 million barrels at the end of October, 1.9 million barrels below the September level. Motor gasoline stocks typically drop in October, when refinery maintenance activities result in reduced motor gasoline production. The October 1988 ending stock level was in line with that of recent years and was only 1.8 million barrels below the October 1987 level.

Residual fuel oil stocks, which normally increase at this time of year, fell 1.8 million barrels in October to 42.4 million barrels. Stocks were drawn down to fill the increased demand for residual fuel oil. Compared with last October, residual fuel oil stocks were 3.2 million barrels lower this year.

LPG stocks decreased 1.7 million barrels in October to 119.9 million barrels. October usually marks a shift in activity from summer buildups to heating season withdrawals. LPG inventories at the end of October were 7.4 million barrels above the level at the end of October 1987.

## Crude Oil

Following 3 consecutive months of substantial stock drawdowns, crude oil stock levels (excluding SPR) rebounded somewhat in October, reaching 339.6 million barrels at the end of the month. This was 11.2 million barrels higher than the level at the end of September. A combination of lower refinery runs and increased imports resulted in higher inventories. Despite the buildup, however, crude oil stocks were

16.3 million barrels below the level at the end of October 1987.

Domestic crude oil production recovered slightly in October, after the threat of hurricanes caused disruptions for several days in September. October production averaged 8.0 million barrels per day, an increase of 0.1 million barrels per day from the September level. For the first 10 months of 1988, crude oil production averaged 8.2 million barrels per day, 2.3 percent below the production level for the comparable period of 1987.

In October, crude oil imports (excluding SPR) reached the highest monthly level since April 1980. Imports increased 0.4 million barrels per day from the September level, reaching 5.5 million barrels per day. Imports from Saudi Arabia and Nigeria accounted for most of the increase. The world price of crude oil declined sharply between May and October. This drop in price stimulated the substantial increase in imports during October. Year-to-date, crude oil imports averaged 5.0 million barrels per day, 8.9 percent higher than during the comparable period of 1987.

## Refinery Utilization

U.S. refinery utilization decreased slightly from 83.7 percent in September to 83.5 percent in October. Gross inputs to distillation units during October averaged 13.3 million barrels per day, while operable capacity averaged 15.9 million barrels per day. The decline from the summer peak in crude oil throughput to the levels during September and October reflects seasonal maintenance activities in preparation for the winter heating season. Downstream activity also decreased in October, reflecting a seasonal reduction in gasoline production. Inputs of fresh feed to catalytic cracking, catalytic hydrocracking, and coking units averaged 6.7 million barrels per day, 0.2 million barrels per day below the September level.

*Stocks of crude oil (excluding SPR) held at storage facilities like this Port Arthur, Texas tank farm increased 11.2 million barrels in October to 339.6 million barrels.*

# Summary Statistics

*Incinerators such as this one at a chemical installation turn toxic chemicals into water vapor and other harmless elements.*

## Table S1. Crude Oil[1] and Petroleum Products Overview

| | Field Production | | | Stock Withdrawal[2] | | | Ending Stocks[3] |
|---|---|---|---|---|---|---|---|
| | Total Domestic[4] | Crude Oil | Natural Gas Plant Liquids | Crude Oil[5] | Petroleum Products | Petroleum Products Supplied | Crude Oil[5] and Petroleum Products |
| | Thousand Barrels per Day | | | | | | Million Barrels |
| **1973 Average** | **10,975** | **9,208** | **1,738** | **11** | **-146** | **17,308** | **1,008** |
| **1974 Average** | **10,498** | **8,774** | **1,688** | **-62** | **-117** | **16,653** | **[8] 1,074** |
| **1975 Average** | **10,045** | **8,375** | **1,633** | **[8] -17** | **[8] -15** | **16,322** | **1,133** |
| **1976 Average** | **9,774** | **8,132** | **1,603** | **-39** | **96** | **17,461** | **1,112** |
| **1977 Average** | **9,913** | **8,245** | **1,618** | **-170** | **-378** | **18,431** | **1,312** |
| **1978 Average** | **10,328** | **8,707** | **1,567** | **-78** | **172** | **18,847** | **1,278** |
| **1979 Average** | **10,179** | **8,552** | **1,584** | **-148** | **-25** | **18,513** | **1,341** |
| **1980 Average** | **10,214** | **8,597** | **1,573** | **-98** | **-42** | **17,056** | **[8] 1,392** |
| **1981 Average** | **10,230** | **8,572** | **1,609** | **[8] -290** | **[8] 130** | **16,058** | **1,484** |
| **1982 Average** | **10,252** | **8,649** | **1,550** | **-136** | **283** | **15,296** | **[8] 1,430** |
| **1983 Average** | **10,299** | **8,688** | **1,559** | **[8] -214** | **[8] 234** | **15,231** | **1,454** |
| **1984 Average** | **10,554** | **8,879** | **1,630** | **-199** | **-81** | **15,726** | **1,556** |
| **1985 Average** | **10,636** | **8,971** | **1,609** | **-50** | **153** | **15,726** | **1,519** |
| **1986** January | 10,911 | 9,137 | 1,711 | -383 | -151 | 16,088 | 1,535 |
| February | 10,916 | 9,173 | 1,696 | -37 | 804 | 16,186 | 1,514 |
| March | 10,664 | 9,013 | 1,604 | -345 | 1,160 | 16,276 | 1,489 |
| April | 10,435 | 8,864 | 1,523 | 41 | 262 | 15,945 | 1,479 |
| May | 10,440 | 8,838 | 1,543 | 260 | -1,109 | 15,993 | 1,506 |
| June | 10,187 | 8,623 | 1,504 | 3 | -1,238 | 16,049 | 1,543 |
| July | 10,225 | 8,660 | 1,507 | -541 | -422 | 16,307 | 1,573 |
| August | 9,875 | 8,374 | 1,445 | 242 | -551 | 16,618 | 1,582 |
| September | 9,852 | 8,328 | 1,468 | -217 | -973 | 15,909 | 1,618 |
| October | 9,954 | 8,419 | 1,477 | -233 | 476 | 16,602 | 1,610 |
| November | 10,061 | 8,412 | 1,569 | 95 | -147 | 16,221 | 1,612 |
| December | 9,985 | 8,352 | 1,571 | 186 | 443 | 17,131 | 1,593 |
| **Average** | **10,289** | **8,680** | **1,551** | **-78** | **-124** | **16,281** | -- |
| **1987** January | 10,139 | 8,480 | 1,582 | -166 | 376 | 16,684 | 1,586 |
| February | 10,073 | 8,389 | 1,618 | -22 | 831 | 16,908 | 1,563 |
| March | 10,131 | 8,464 | 1,598 | -125 | 340 | 16,165 | 1,557 |
| April | 10,139 | 8,498 | 1,590 | 50 | 532 | 16,524 | 1,539 |
| May | 9,977 | 8,336 | 1,585 | 36 | -116 | 16,026 | 1,542 |
| June | 9,906 | 8,279 | 1,578 | -165 | -42 | 16,830 | 1,548 |
| July | 9,895 | 8,251 | 1,582 | 33 | -372 | 17,113 | 1,558 |
| August | 9,843 | 8,210 | 1,571 | -345 | -737 | 16,346 | 1,592 |
| September | 9,851 | 8,205 | 1,582 | -220 | -236 | 16,670 | 1,606 |
| October | 10,037 | 8,364 | 1,602 | -661 | 523 | 16,941 | 1,610 |
| November | 10,112 | 8,397 | 1,637 | -355 | -478 | 16,343 | 1,635 |
| December | 10,001 | 8,318 | 1,621 | 405 | 482 | 17,445 | 1,607 |
| **Average** | **10,008** | **8,349** | **1,595** | **-128** | **87** | **16,665** | -- |
| **1988** January | E 9,874 | E 8,245 | 1,569 | 56 | 285 | 17,224 | 1,597 |
| February | E 10,016 | E 8,376 | 1,594 | -130 | 895 | 17,584 | 1,575 |
| March | E 10,044 | E 8,347 | 1,628 | -212 | 748 | 17,530 | 1,559 |
| April | E 9,935 | E 8,268 | 1,609 | -194 | -450 | 16,440 | 1,578 |
| May | E 9,881 | E 8,203 | 1,624 | -41 | -1,049 | 16,117 | 1,612 |
| June | E 9,815 | E 8,158 | 1,605 | -113 | 146 | 17,054 | 1,611 |
| July | E 9,728 | E 8,059 | 1,609 | 270 | -788 | 16,555 | 1,627 |
| August | E 9,756 | E 8,063 | 1,624 | 495 | -304 | 17,375 | 1,621 |
| September | E 9,585 | E 7,900 | 1,622 | 74 | -296 | 16,816 | 1,627 |
| October* | RE 9,703 | RE 7,974 | R 1,665 | R -403 | R 315 | R 17,481 | R 1,630 |
| November** | PE 9,716 | PE 8,026 | E 1,623 | E *-102* | E *5* | E *17,320* | E *1,631* |
| **11-Mo. Average** | **PE 9,822** | **PE 8,146** | **E 1,616** | **E -26** | **E -49** | **E 17,044** | -- |
| **1987 11-Mo. Average** | **10,009** | **8,352** | **1,593** | **-178** | **51** | **16,593** | -- |
| **1986 11-Mo. Average** | **10,317** | **8,711** | **1,549** | **-103** | **-176** | **16,202** | -- |

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[1] Includes lease condensate.

[2] A negative number indicates an increase in stocks and a positive number indicates a decrease.

[3] Stocks are totals as of end of period.

[4] Includes crude oil, natural gas plant liquids, other hydrocarbons, and alcohol.

[5] Includes stocks located in the Strategic Petroleum Reserve.

[6] Includes crude oil for storage in the Strategic Petroleum Reserve.

[7] Net Imports equal Imports minus Exports.

[8] In January 1975, 1981, and 1983, numerous respondents were added to surveys affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10.

Footnotes continued on following page.

# Table S1. Crude Oil[1] and Petroleum Products Overview (Continued)

| | Imports | | | Exports | | | |
|---|---|---|---|---|---|---|---|
| | Total | Crude Oil [6] | Petroleum Products | Total | Crude Oil | Petroleum Products | Net Imports[7] |
| | Thousand Barrels per Day | | | | | | |
| **1973 Average** | **6,256** | **3,244** | **3,012** | **231** | **2** | **229** | **6,025** |
| **1974 Average** | **6,112** | **3,477** | **2,635** | **221** | **3** | **218** | **5,892** |
| **1975 Average** | **6,056** | **4,105** | **1,951** | **209** | **6** | **204** | **5,846** |
| **1976 Average** | **7,313** | **5,287** | **2,026** | **223** | **8** | **215** | **7,090** |
| **1977 Average** | **8,807** | **6,615** | **2,193** | **243** | **50** | **193** | **8,565** |
| **1978 Average** | **8,363** | **6,356** | **2,008** | **362** | **158** | **204** | **8,002** |
| **1979 Average** | **8,456** | **6,519** | **1,937** | **472** | **235** | **237** | **7,984** |
| **1980 Average** | **6,909** | **5,263** | **1,646** | **544** | **287** | **258** | **6,365** |
| **1981 Average** | **5,996** | **4,396** | **1,599** | **595** | **228** | **367** | **5,401** |
| **1982 Average** | **5,113** | **3,488** | **1,625** | **815** | **236** | **579** | **4,298** |
| **1983 Average** | **5,051** | **3,329** | **1,722** | **739** | **164** | **575** | **4,312** |
| **1984 Average** | **5,437** | **3,426** | **2,011** | **722** | **181** | **541** | **4,715** |
| **1985 Average** | **5,067** | **3,201** | **1,866** | **781** | **204** | **577** | **4,286** |
| **1986** January | 5,573 | 3,472 | 2,101 | 859 | 159 | 700 | 4,714 |
| February | 4,676 | 2,968 | 1,709 | 876 | 162 | 715 | 3,800 |
| March | 4,712 | 2,988 | 1,724 | 732 | 212 | 520 | 3,980 |
| April | 5,439 | 3,684 | 1,755 | 850 | 94 | 756 | 4,589 |
| May | 6,400 | 4,250 | 2,150 | 724 | 98 | 625 | 5,676 |
| June | 6,848 | 4,635 | 2,213 | 642 | 240 | 401 | 6,206 |
| July | 6,942 | 4,726 | 2,216 | 685 | 65 | 620 | 6,256 |
| August | 7,168 | 4,859 | 2,309 | 868 | 233 | 635 | 6,300 |
| September | 7,090 | 5,031 | 2,059 | 714 | 161 | 553 | 6,375 |
| October | 6,427 | 4,419 | 2,008 | 831 | 151 | 680 | 5,597 |
| November | 6,592 | 4,615 | 1,977 | 821 | 115 | 706 | 5,771 |
| December | 6,700 | 4,412 | 2,288 | 820 | 159 | 661 | 5,881 |
| **Average** | **6,224** | **4,178** | **2,045** | **785** | **154** | **631** | **5,439** |
| **1987** January | 6,353 | 4,385 | 1,968 | 703 | 84 | 619 | 5,650 |
| February | 5,984 | 3,866 | 2,118 | 977 | 284 | 694 | 5,007 |
| March | 5,794 | 3,779 | 2,015 | 720 | 150 | 570 | 5,074 |
| April | 5,911 | 4,132 | 1,779 | 870 | 247 | 624 | 5,041 |
| May | 6,073 | 4,340 | 1,732 | 666 | 69 | 597 | 5,407 |
| June | 6,769 | 4,807 | 1,962 | 669 | 116 | 554 | 6,099 |
| July | 7,588 | 5,295 | 2,293 | 680 | 149 | 531 | 6,908 |
| August | 7,454 | 5,510 | 1,944 | 664 | 141 | 523 | 6,790 |
| September | 7,178 | 5,110 | 2,068 | 795 | 116 | 680 | 6,382 |
| October | 7,068 | 5,142 | 1,926 | 646 | 84 | 562 | 6,422 |
| November | 7,068 | 5,013 | 2,055 | 737 | 164 | 573 | 6,331 |
| December | 6,833 | 4,640 | 2,194 | 1,057 | 220 | 838 | 5,776 |
| **Average** | **6,678** | **4,674** | **2,004** | **764** | **151** | **613** | **5,914** |
| **1988** January | 6,900 | 4,619 | 2,281 | 891 | 212 | 679 | 6,009 |
| February | 6,995 | 4,692 | 2,303 | 867 | 149 | 718 | 6,128 |
| March | 6,727 | 4,788 | 1,938 | 839 | 218 | 622 | 5,888 |
| April | 7,050 | 5,126 | 1,924 | 678 | 117 | 562 | 6,371 |
| May | 7,218 | 5,234 | 1,983 | 817 | 141 | 676 | 6,401 |
| June | 6,885 | 5,055 | 1,830 | 941 | 141 | 800 | 5,944 |
| July | 6,994 | 5,006 | 1,988 | 831 | 191 | 640 | 6,164 |
| August | 7,174 | 5,039 | 2,135 | 817 | 155 | 661 | 6,357 |
| September | 7,220 | 5,183 | 2,037 | 675 | 122 | 554 | 6,545 |
| October* | $^{R}$7,666 | $^{R}$5,542 | $^{R}$2,124 | $^{R}$737 | $^{R}$171 | $^{R}$566 | $^{R}$6,929 |
| November** | $^{E}$*7,764* | $^{E}$*5,361* | $^{E}$*2,403* | $^{E}$755 | $^{E}$141 | $^{E}$615 | $^{E}$7,008 |
| **11-Mo. Average** | $^{E}$**7,145** | $^{E}$**5,060** | $^{E}$**2,085** | $^{E}$**805** | $^{E}$**160** | $^{E}$**644** | $^{E}$**6,340** |
| **1987 11-Mo. Average** | **6,663** | **4,677** | **1,986** | **736** | **144** | **592** | **5,927** |
| **1986 11-Mo. Average** | **6,179** | **4,156** | **2,023** | **781** | **154** | **628** | **5,398** |

Footnotes continued.

R = Revised data. (s) = Less than 500 barrels per day. E = Estimated. PE = Preliminary estimate. RE = Revised estimate.

* See Explanatory Note 9.1.

** Italics denote estimates based upon preliminary data. See Explanatory Note 8.

Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: See the last page of this section.

**Figure S1. Petroleum Overview**

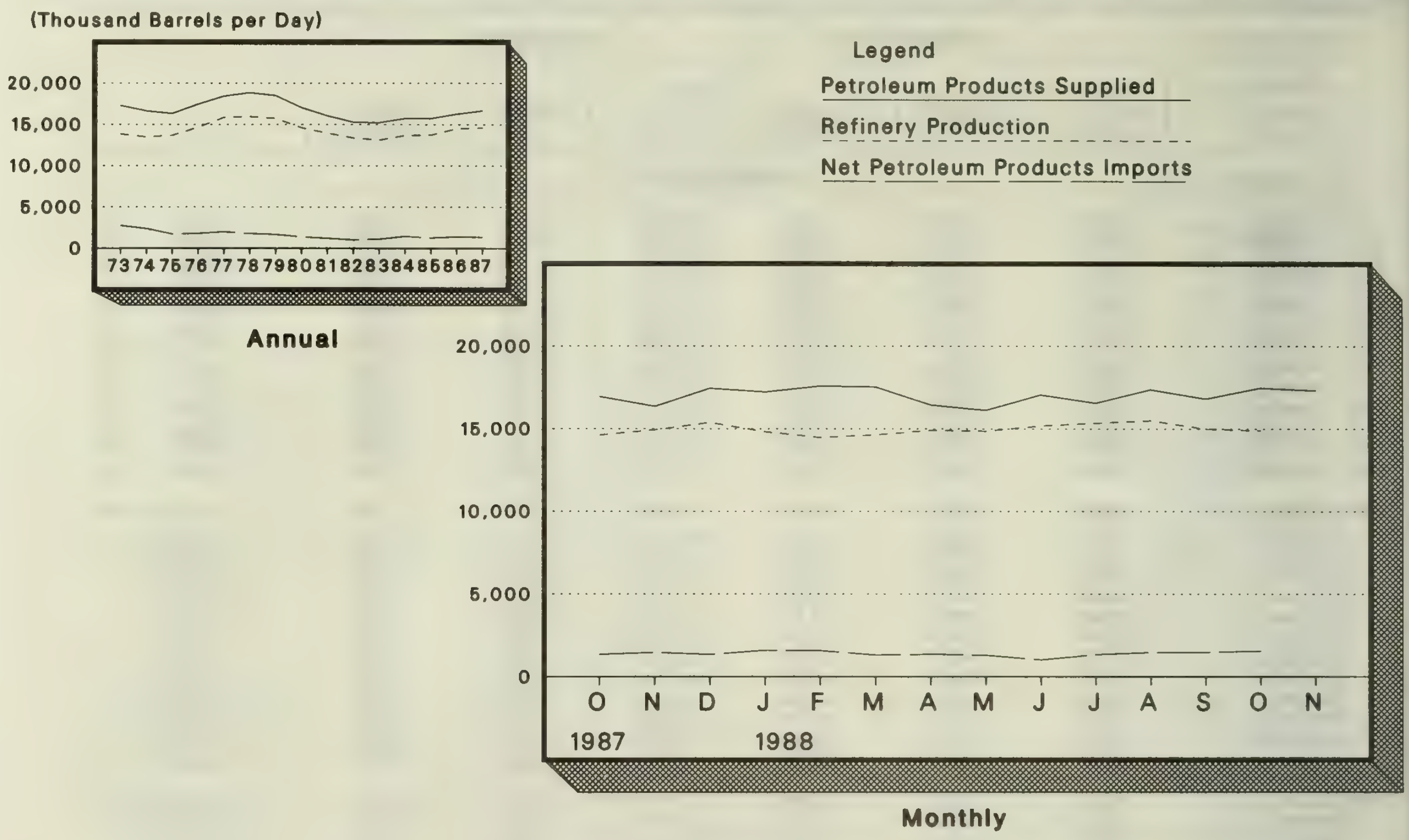
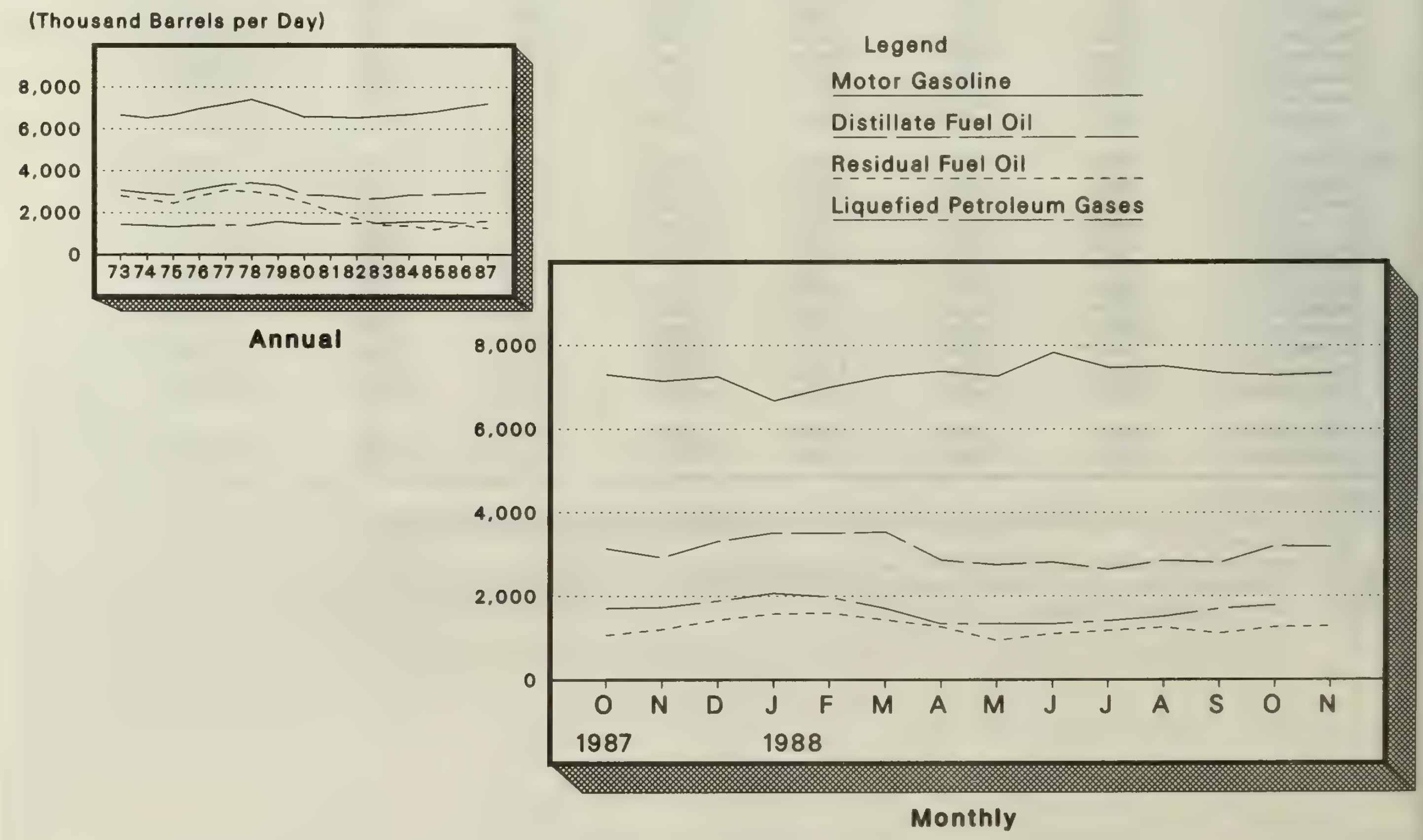
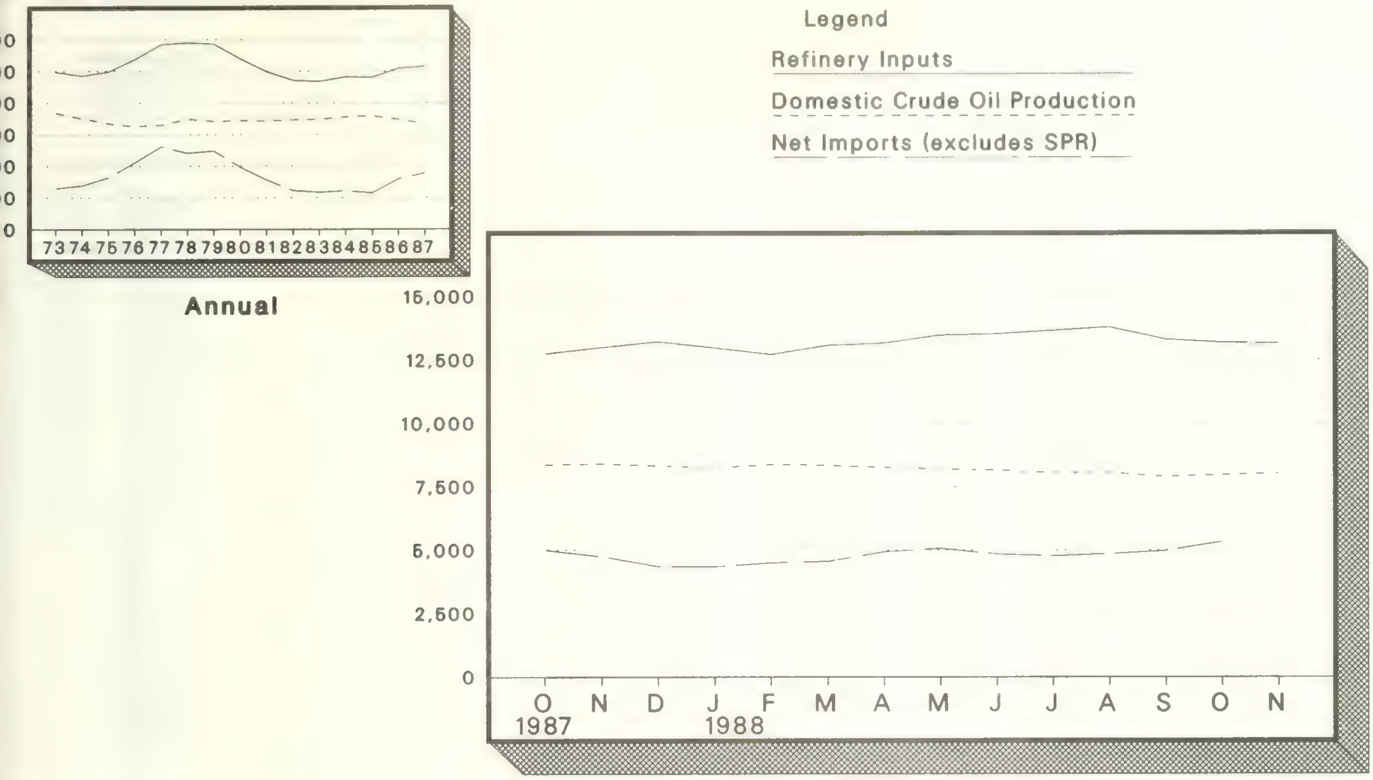


**Figure S2. Petroleum Products Supplied**



## ure S3. Crude Oil Supply and Disposition

ousand Barrels per Day)

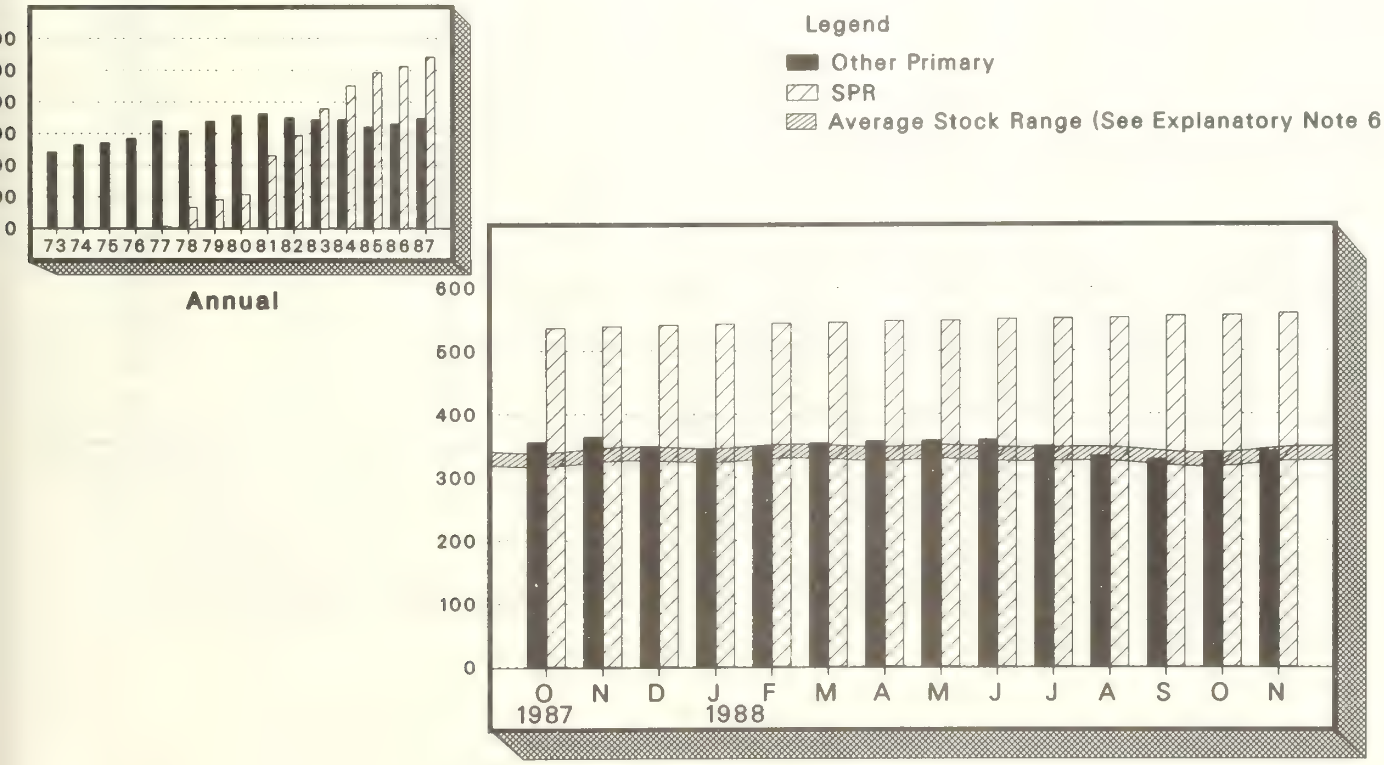


Annual

Monthly

## ure S4. Crude Oil Ending Stocks

llion Barrels)



Annual

Monthly

# Table S2. Crude Oil[1] Supply and Disposition

| | | Supply | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Field Production | | Imports | | | Stock Withdrawal[3] | | Unaccounted for Crude Oil[5] |
| | | Total Domestic | Alaskan | Total | SPR[4] | Other | SPR[4] | Other | |
| | | Thousand Barrels per Day | | | | | | | |
| 1973 | **Average** | **9,208** | **198** | **3,244** | **–** | **3,244** | **–** | **11** | **3** |
| 1974 | **Average** | **8,774** | **193** | **3,477** | **–** | **3,477** | **–** | **-62** | **-25** |
| 1975 | **Average** | **8,375** | **191** | **4,105** | **–** | **4,105** | **–** | **-17** | **17** |
| 1976 | **Average** | **8,132** | **173** | **5,287** | **–** | **5,287** | **–** | **-39** | **77** |
| 1977 | **Average** | **8,245** | **464** | **6,615** | **21** | **6,594** | **-20** | **-150** | **-6** |
| 1978 | **Average** | **8,707** | **1,229** | **6,356** | **162** | **6,195** | **-163** | **84** | **-57** |
| 1979 | **Average** | **8,552** | **1,401** | **6,519** | **67** | **6,452** | **-67** | **-81** | **-11** |
| 1980 | **Average** | **8,597** | **1,617** | **5,263** | **44** | **5,219** | **-45** | **-52** | **34** |
| 1981 | **Average** | **8,572** | **1,609** | **4,396** | **256** | **4,141** | **-336** | [7] **46** | **83** |
| 1982 | **Average** | **8,649** | **1,695** | **3,488** | **165** | **3,323** | **-174** | **38** | **71** |
| 1983 | **Average** | **8,688** | **1,714** | **3,329** | **234** | **3,096** | **-234** | [7] **20** | **114** |
| 1984 | **Average** | **8,879** | **1,722** | **3,426** | **197** | **3,229** | **-195** | **-4** | **185** |
| 1985 | **Average** | **8,971** | **1,825** | **3,201** | **118** | **3,083** | **-117** | **67** | **145** |
| 1986 | January | 9,137 | 1,870 | 3,472 | 51 | 3,420 | -35 | -348 | 364 |
| | February | 9,173 | 1,907 | 2,968 | 24 | 2,944 | -35 | -2 | 32 |
| | March | 9,013 | 1,860 | 2,988 | 59 | 2,929 | -49 | -296 | 259 |
| | April | 8,864 | 1,836 | 3,684 | 63 | 3,621 | -63 | 104 | 70 |
| | May | 8,838 | 1,927 | 4,250 | 36 | 4,215 | -35 | 295 | 79 |
| | June | 8,623 | 1,887 | 4,635 | 64 | 4,571 | -64 | 66 | 292 |
| | July | 8,660 | 1,903 | 4,726 | 52 | 4,674 | -52 | -489 | 189 |
| | August | 8,374 | 1,811 | 4,859 | 51 | 4,809 | -51 | 293 | 93 |
| | September | 8,328 | 1,782 | 5,031 | 47 | 4,984 | -47 | -170 | 161 |
| | October | 8,419 | 1,927 | 4,419 | 37 | 4,382 | -36 | -197 | 223 |
| | November | 8,412 | 1,883 | 4,615 | 45 | 4,570 | -65 | 160 | -136 |
| | December | 8,352 | 1,807 | 4,412 | 48 | 4,365 | -68 | 254 | 28 |
| | **Average** | **8,680** | **1,867** | **4,178** | **48** | **4,130** | **-50** | **-28** | **139** |
| 1987 | January | 8,480 | 2,019 | 4,385 | 92 | 4,293 | -108 | -58 | -5 |
| | February | 8,389 | 1,853 | 3,866 | 44 | 3,822 | -64 | 42 | 382 |
| | March | 8,464 | 1,968 | 3,779 | 95 | 3,684 | -106 | -19 | 151 |
| | April | 8,498 | 1,990 | 4,132 | 57 | 4,076 | -67 | 116 | 120 |
| | May | 8,336 | 1,979 | 4,340 | 92 | 4,248 | -101 | 137 | 51 |
| | June | 8,279 | 1,930 | 4,807 | 64 | 4,743 | -69 | -97 | 434 |
| | July | 8,251 | 1,910 | 5,295 | 76 | 5,218 | -91 | 124 | 32 |
| | August | 8,210 | 1,908 | 5,510 | 63 | 5,447 | -63 | -281 | 177 |
| | September | 8,205 | 1,874 | 5,110 | 64 | 5,047 | -64 | -157 | 217 |
| | October | 8,364 | 1,986 | 5,142 | 57 | 5,085 | -57 | -604 | -3 |
| | November | 8,397 | 2,068 | 5,013 | 97 | 4,916 | -97 | -258 | 115 |
| | December | 8,318 | 2,043 | 4,640 | 68 | 4,572 | -68 | 472 | 101 |
| | **Average** | **8,349** | **1,962** | **4,674** | **73** | **4,601** | **-80** | **-49** | **145** |
| 1988 | January | E 8,245 | E 1,999 | 4,619 | 67 | 4,552 | -67 | 123 | 303 |
| | February | E 8,376 | E 2,070 | 4,692 | 49 | 4,643 | -49 | -81 | -21 |
| | March | E 8,347 | E 2,086 | 4,788 | 23 | 4,766 | -26 | -187 | 419 |
| | April | E 8,268 | E 2,029 | 5,126 | 78 | 5,049 | -77 | -117 | 126 |
| | May | E 8,203 | E 2,016 | 5,234 | 22 | 5,213 | -22 | -19 | 251 |
| | June | E 8,158 | E 1,984 | 5,055 | 70 | 4,985 | -70 | -43 | 601 |
| | July | E 8,059 | E 1,960 | 5,006 | 42 | 4,965 | -42 | 312 | 548 |
| | August | E 8,063 | E 2,009 | 5,039 | 26 | 5,013 | -26 | 521 | 385 |
| | September | E 7,900 | E 2,020 | 5,183 | 84 | 5,099 | -84 | 157 | 313 |
| | October* | RE 7,974 | RE 2,010 | R 5,542 | R 43 | R 5,499 | R -43 | R -360 | R 288 |
| | November** | PE 8,026 | PE 2,041 | E *5,361* | E *75* | E *5,286* | E *-87* | E *-15* | E 47 |
| | **11-Mo. Average** | **PE 8,146** | **PE 2,020** | **E 5,060** | **E 52** | **E 5,007** | **E -54** | **E 28** | **E 298** |
| 1987 | **11-Mo. Average** | **8,352** | **1,954** | **4,677** | **73** | **4,604** | **-81** | **-97** | **149** |
| 1986 | **11-Mo. Average** | **8,711** | **1,872** | **4,156** | **48** | **4,108** | **-48** | **-54** | **150** |

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[1] Includes lease condensate.
[2] Stocks are totals as of end of period.
[3] A negative number indicates an increase in stocks and a positive number indicates a decrease.
[4] Strategic Petroleum Reserve.
[5] A balancing item.
[6] Beginning in January 1983, crude oil used directly as fuel is shown as product supplied.
[7] Stocks of Alaskan crude oil in transit were included beginning in January 1981. Stock withdrawals are calculated using new basis stock levels.

See Explanatory Notes 10 and 11.

Footnotes continued on following page.

# Table S2. Crude Oil[1] Supply and Disposition (Continued)

| | Supply | Disposition | | | | Ending Stocks[2] | | |
|---|---|---|---|---|---|---|---|---|
| | Crude Used Directly[6] | Crude Losses | Refinery Inputs | Exports | Product Supplied[6] | Total | SPR[4] | Other Primary |
| | Thousand Barrels per Day | | | | | Million Barrels | | |
| 1973 **Average** | -19 | 13 | 12,431 | 2 | – | 242 | – | 242 |
| 1974 **Average** | -15 | 13 | 12,133 | 3 | – | 265 | – | 265 |
| 1975 **Average** | -17 | 13 | 12,442 | 6 | – | 271 | – | 271 |
| 1976 **Average** | -18 | 15 | 13,416 | 8 | – | 285 | – | 285 |
| 1977 **Average** | -14 | 16 | 14,602 | 50 | – | 348 | 7 | 340 |
| 1978 **Average** | -14 | 16 | 14,739 | 158 | – | 376 | 67 | 309 |
| 1979 **Average** | -13 | 16 | 14,648 | 235 | – | 430 | 91 | 339 |
| 1980 **Average** | -13 | 15 | 13,481 | 287 | – | [7] 466 | 108 | [7] 358 |
| 1981 **Average** | -58 | 5 | 12,470 | 228 | – | 594 | 230 | 363 |
| 1982 **Average** | -59 | 3 | 11,774 | 236 | – | [7] 644 | 294 | [7] 350 |
| 1983 **Average** | – | 2 | 11,685 | 164 | 66 | 723 | 379 | 344 |
| 1984 **Average** | – | 2 | 12,044 | 181 | 64 | 796 | 451 | 345 |
| 1985 **Average** | – | 1 | 12,002 | 204 | 60 | 814 | 493 | 321 |
| 1986 January | – | 1 | 12,374 | 159 | 57 | 826 | 494 | 332 |
| February | – | (s) | 11,918 | 162 | 56 | 827 | 495 | 332 |
| March | – | (s) | 11,652 | 212 | 52 | 838 | 497 | 341 |
| April | – | (s) | 12,512 | 94 | 51 | 837 | 499 | 338 |
| May | – | (s) | 13,279 | 98 | 49 | 829 | 500 | 329 |
| June | – | (s) | 13,261 | 240 | 52 | 828 | 502 | 327 |
| July | – | (s) | 12,917 | 65 | 51 | 845 | 503 | 342 |
| August | – | (s) | 13,287 | 233 | 48 | 838 | 505 | 333 |
| September | – | (s) | 13,097 | 161 | 45 | 844 | 506 | 338 |
| October | – | (s) | 12,636 | 151 | 41 | 851 | 508 | 344 |
| November | – | (s) | 12,831 | 115 | 41 | 849 | 509 | 339 |
| December | – | (s) | 12,777 | 159 | 42 | 843 | 512 | 331 |
| **Average** | – | (s) | 12,716 | 154 | 49 | – | – | – |
| 1987 January | – | 1 | 12,570 | 84 | 41 | 848 | 515 | 333 |
| February | – | (s) | 12,290 | 284 | 41 | 849 | 517 | 332 |
| March | – | 1 | 12,081 | 150 | 39 | 852 | 520 | 332 |
| April | – | (s) | 12,512 | 247 | 41 | 851 | 522 | 329 |
| May | – | (s) | 12,653 | 69 | 42 | 850 | 525 | 325 |
| June | – | (s) | 13,202 | 116 | 36 | 855 | 527 | 328 |
| July | – | (s) | 13,430 | 149 | 32 | 854 | 530 | 324 |
| August | – | (s) | 13,380 | 141 | 31 | 864 | 532 | 332 |
| September | – | (s) | 13,168 | 116 | 28 | 871 | 534 | 337 |
| October | – | (s) | 12,733 | 84 | 25 | 892 | 536 | 356 |
| November | – | (s) | 12,981 | 164 | 25 | 902 | 539 | 364 |
| December | – | (s) | 13,212 | 220 | 31 | 890 | 541 | 349 |
| **Average** | – | (s) | 12,854 | 151 | 34 | – | – | – |
| 1988 January | – | (s) | 12,975 | 212 | 36 | 888 | 543 | 345 |
| February | – | (s) | 12,715 | 149 | 52 | 892 | 544 | 348 |
| March | – | (s) | 13,072 | 218 | 52 | 899 | 545 | 354 |
| April | – | (s) | 13,167 | 117 | 42 | 904 | 547 | 357 |
| May | – | (s) | 13,472 | 141 | 34 | 906 | 548 | 358 |
| June | – | (s) | 13,528 | 141 | 32 | 909 | 550 | 359 |
| July | – | (s) | 13,663 | 191 | 29 | 901 | 551 | 349 |
| August | – | (s) | 13,797 | 155 | 30 | 885 | 552 | 333 |
| September | – | (s) | 13,309 | 122 | 37 | 883 | 555 | 328 |
| October* | – | (s) | R 13,188 | R 171 | R 42 | R 896 | 556 | R 340 |
| November** | – | E (s) | E *13,158* | E 141 | E 33 | E *900* | E *559* | E *341* |
| **11-Mo. Average** | – | E (s) | E 13,280 | E 160 | E 38 | – | – | – |
| 1987 **11-Mo. Average** | – | (s) | 12,821 | 144 | 35 | – | – | – |
| 1986 **11-Mo. Average** | – | (s) | 12,710 | 154 | 49 | – | – | – |

Footnotes continued.

R = Revised data. (s) = Less than 500 barrels per day. E = Estimated. PE = Preliminary estimate. RE = Revised estimate.

* See Explanatory Note 9.2.

** Italics denote estimates based upon preliminary data. See Explanatory Note 8.

Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: See the last page of this section.

# Table S3. Crude Oil and Petroleum Product Imports

| | | Imports from OPEC Sources [1] | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Algeria | Libya | Saudi Arabia[2] | United Arab Emirates | Indonesia | Iran | Nigeria | Venezuela | Other OPEC [2] | Total OPEC[3] | Total Arab OPEC [4] |
| | | Thousand Barrels per Day | | | | | | | | | | |
| **1973** | **Average** | **136** | **164** | **486** | **71** | **213** | **223** | **459** | **1,135** | **106** | **2,993** | **915** |
| **1974** | **Average** | **190** | **4** | **461** | **74** | **300** | **469** | **713** | **979** | **88** | **3,280** | **752** |
| **1975** | **Average** | **282** | **232** | **715** | **117** | **390** | **280** | **762** | **702** | **122** | **3,601** | **1,383** |
| **1976** | **Average** | **432** | **453** | **1,230** | **254** | **539** | **298** | **1,025** | **700** | **134** | **5,066** | **2,424** |
| **1977** | **Average** | **559** | **723** | **1,380** | **335** | **541** | **535** | **1,143** | **690** | **287** | **6,193** | **3,185** |
| **1978** | **Average** | **649** | **654** | **1,144** | **385** | **573** | **555** | **919** | **645** | **226** | **5,751** | **2,963** |
| **1979** | **Average** | **636** | **658** | **1,356** | **281** | **420** | **304** | **1,080** | **690** | **212** | **5,637** | **3,056** |
| **1980** | **Average** | **488** | **554** | **1,261** | **172** | **348** | **9** | **857** | **481** | **130** | **4,300** | **2,551** |
| **1981** | **Average** | **311** | **319** | **1,129** | **81** | **366** | **0** | **620** | **406** | **90** | **3,323** | **1,848** |
| **1982** | **Average** | **170** | **26** | **552** | **92** | **248** | **35** | **514** | **412** | **97** | **2,146** | **854** |
| **1983** | **Average** | **240** | **0** | **337** | **30** | **338** | **48** | **302** | **422** | **144** | **1,862** | **632** |
| **1984** | **Average** | **323** | **1** | **325** | **117** | **343** | **10** | **216** | **548** | **166** | **2,049** | **819** |
| **1985** | **Average** | **187** | **4** | **168** | **45** | **314** | **27** | **293** | **605** | **187** | **1,830** | **472** |
| **1986** | January | 215 | 0 | 664 | 11 | 290 | 0 | 278 | 629 | 210 | 2,298 | 976 |
| | February | 157 | 0 | 574 | 0 | 290 | (s) | 204 | 518 | 64 | 1,807 | 757 |
| | March | 260 | 0 | 482 | 0 | 161 | 0 | 328 | 797 | 117 | 2,145 | 798 |
| | April | 275 | 0 | 698 | 21 | 292 | 0 | 319 | 831 | 139 | 2,576 | 1,058 |
| | May | 193 | 0 | 574 | 40 | 314 | 40 | 398 | 899 | 290 | 2,749 | 966 |
| | June | 319 | 0 | 662 | 83 | 353 | 0 | 382 | 772 | 439 | 3,010 | 1,377 |
| | July | 310 | 0 | 738 | 59 | 532 | 66 | 542 | 730 | 330 | 3,307 | 1,357 |
| | August | 363 | 0 | 680 | 37 | 274 | 93 | 606 | 916 | 378 | 3,346 | 1,339 |
| | September | 245 | 0 | 810 | 62 | 341 | 31 | 684 | 856 | 356 | 3,383 | 1,388 |
| | October | 305 | 0 | 697 | 147 | 388 | 0 | 530 | 863 | 346 | 3,276 | 1,387 |
| | November | 311 | 0 | 868 | 34 | 335 | 0 | 483 | 843 | 214 | 3,088 | 1,295 |
| | December | 291 | 0 | 769 | 30 | 251 | 0 | 511 | 841 | 284 | 2,976 | 1,223 |
| | **Average** | **271** | **0** | **685** | **44** | **318** | **19** | **440** | **793** | **265** | **2,837** | **1,162** |
| **1987** | January | 156 | 0 | 875 | 15 | 254 | 0 | 346 | 899 | 218 | 2,764 | 1,184 |
| | February | 307 | 0 | 776 | 54 | 418 | 30 | 256 | 791 | 155 | 2,785 | 1,222 |
| | March | 334 | 0 | 430 | 0 | 317 | 73 | 312 | 702 | 135 | 2,305 | 843 |
| | April | 323 | 0 | 463 | 62 | 236 | 47 | 512 | 710 | 77 | 2,430 | 866 |
| | May | 196 | 0 | 499 | 26 | 297 | 75 | 550 | 913 | 119 | 2,675 | 775 |
| | June | 247 | 0 | 782 | 45 | 261 | 165 | 546 | 808 | 268 | 3,122 | 1,275 |
| | July | 347 | 0 | 756 | 42 | 349 | 237 | 792 | 854 | 157 | 3,533 | 1,264 |
| | August | 250 | 0 | 961 | 103 | 312 | 208 | 732 | 831 | 351 | 3,748 | 1,611 |
| | September | 378 | 0 | 902 | 146 | 242 | 193 | 615 | 821 | 263 | 3,560 | 1,640 |
| | October | 274 | 0 | 1,051 | 111 | 305 | 86 | 518 | 829 | 401 | 3,576 | 1,713 |
| | November | 395 | 0 | 637 | 97 | 219 | 41 | 607 | 771 | 402 | 3,169 | 1,477 |
| | December | 339 | 0 | 876 | 31 | 216 | 23 | 613 | 717 | 220 | 3,033 | 1,415 |
| | **Average** | **295** | **0** | **751** | **61** | **285** | **98** | **535** | **804** | **231** | **3,060** | **1,274** |
| **1988** | January | 312 | 0 | 849 | 61 | 179 | [5] 1 | 406 | 752 | 540 | 3,100 | 1,632 |
| | February | 358 | 0 | 1,265 | 79 | 148 | 0 | 501 | 830 | 214 | 3,394 | 1,883 |
| | March | 259 | 0 | 934 | 6 | 123 | 0 | 541 | 790 | 352 | 3,006 | 1,506 |
| | April | 342 | 0 | 931 | 48 | 166 | 0 | 651 | 812 | 385 | 3,335 | 1,613 |
| | May | 320 | 0 | 1,034 | 34 | 298 | 0 | 488 | 835 | 354 | 3,363 | 1,710 |
| | June | 262 | 0 | 923 | 11 | 158 | 0 | 703 | 839 | 495 | 3,391 | 1,603 |
| | July | 193 | 0 | 1,076 | 43 | 198 | 0 | 614 | 706 | 609 | 3,439 | 1,897 |
| | August | 253 | 0 | 1,161 | 0 | 153 | 0 | 557 | 809 | 669 | 3,603 | 2,024 |
| | September | 274 | 0 | 1,048 | 22 | 231 | 0 | 528 | 803 | 697 | 3,603 | 2,009 |
| | October | 326 | 0 | 1,244 | 16 | 216 | 0 | 686 | 758 | 539 | 3,785 | 2,056 |
| | **10-Mo. Average** | **289** | **0** | **1,046** | **32** | **187** | **(s)** | **567** | **793** | **487** | **3,402** | **1,793** |
| **1987** | **10-Mo. Average** | **281** | **0** | **750** | **60** | **298** | **112** | **520** | **817** | **215** | **3,052** | **1,239** |
| **1986** | **10-Mo. Average** | **265** | **0** | **658** | **46** | **324** | **23** | **429** | **783** | **269** | **2,798** | **1,143** |

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[1] Excludes petroleum imported into the United States indirectly from members of the Organization of Petroleum Exporting Countries (OPEC), primarily from Caribbean and West European areas, as petroleum products that were refined from crude oil produced by OPEC.

[2] The other members of OPEC are Ecuador, Gabon, Iraq, Kuwait, and Qatar. Prior to January 1988, imports from the Neutral Zone between Kuwait and Saudi Arabia are included in imports from Saudi Arabia. From January 1988 forward, those imports are included in imports from "Other OPEC".

[3] "Total OPEC" consists of Ecuador, Gabon, Indonesia, Iran, Nigeria, and Venezuela, as well as the Arab members. Imports from the Neutral Zone between Kuwait and Saudi Arabia are included in imports from "Total OPEC".

[4] The Arab members of OPEC are Algeria, Iraq, Kuwait, Libya, Qatar, Saudi Arabia, and the United Arab Emirates.

[5] A small amount of Iranian crude oil entered the United States (defined in this publication as the 50 States and the District of Columbia) in January 1988 from the Virgin Islands. This oil originated in Iran and was exported to the Virgin Islands prior to the signing of Executive Order 12613 on October 29, 1987.

Footnotes continued on following page.

# Table S3. Crude Oil and Petroleum Product Imports (Continued)

| | | Imports from Non-OPEC Sources [6] | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Bahamas | Canada | Mexico | Netherlands Antilles | Trinidad and Tobago | United Kingdom | Puerto Rico | Virgin Islands | Other Non-OPEC | Total Non-OPEC | Total Imports |
| | | Thousand Barrels per Day | | | | | | | | | | |
| 1973 | **Average** | 174 | 1,325 | 16 | 585 | 255 | 15 | 99 | 329 | 465 | 3,263 | 6,256 |
| 1974 | **Average** | 164 | 1,070 | 8 | 511 | 251 | 8 | 90 | 391 | 340 | 2,832 | 6,112 |
| 1975 | **Average** | 152 | 846 | 71 | 332 | 242 | 14 | 90 | 406 | 300 | 2,454 | 6,056 |
| 1976 | **Average** | 118 | 599 | 87 | 275 | 274 | 31 | 88 | 422 | 353 | 2,247 | 7,313 |
| 1977 | **Average** | 171 | 517 | 179 | 211 | 289 | 126 | 105 | 466 | 550 | 2,614 | 8,807 |
| 1978 | **Average** | 160 | 467 | 318 | 229 | 253 | 180 | 94 | 429 | 484 | 2,613 | 8,363 |
| 1979 | **Average** | 147 | 538 | 439 | 231 | 190 | 202 | 92 | 431 | 548 | 2,819 | 8,456 |
| 1980 | **Average** | 78 | 455 | 533 | 225 | 176 | 176 | 88 | 388 | 491 | 2,609 | 6,909 |
| 1981 | **Average** | 74 | 447 | 522 | 197 | 133 | 375 | 62 | 327 | 534 | 2,672 | 5,996 |
| 1982 | **Average** | 65 | 482 | 685 | 175 | 112 | 456 | 50 | 316 | 627 | 2,968 | 5,113 |
| 1983 | **Average** | 125 | 547 | 826 | 189 | 96 | 382 | 40 | 282 | 701 | 3,189 | 5,051 |
| 1984 | **Average** | 88 | 630 | 748 | 188 | 94 | 402 | 42 | 294 | 902 | 3,388 | 5,437 |
| 1985 | **Average** | 40 | 770 | 816 | 40 | 113 | 310 | 28 | 247 | 873 | 3,237 | 5,067 |
| 1986 | January | 62 | 823 | 681 | 58 | 108 | 333 | 21 | 326 | 862 | 3,275 | 5,573 |
| | February | 33 | 690 | 557 | 11 | 85 | 218 | 18 | 309 | 949 | 2,870 | 4,676 |
| | March | 18 | 750 | 616 | 27 | 79 | 178 | 25 | 186 | 688 | 2,567 | 4,712 |
| | April | 34 | 798 | 694 | 13 | 111 | 188 | 23 | 209 | 793 | 2,863 | 5,439 |
| | May | 32 | 881 | 743 | 37 | 130 | 365 | 27 | 237 | 1,199 | 3,651 | 6,400 |
| | June | 29 | 753 | 884 | 17 | 167 | 569 | 30 | 233 | 1,157 | 3,838 | 6,848 |
| | July | 44 | 763 | 850 | 25 | 131 | 353 | 29 | 237 | 1,202 | 3,634 | 6,942 |
| | August | 39 | 801 | 738 | 12 | 133 | 584 | 7 | 214 | 1,294 | 3,822 | 7,168 |
| | September | 15 | 801 | 615 | 17 | 162 | 437 | 23 | 291 | 1,345 | 3,706 | 7,090 |
| | October | 38 | 842 | 680 | 26 | 112 | 173 | 21 | 215 | 1,043 | 3,151 | 6,427 |
| | November | 39 | 960 | 565 | 53 | 129 | 448 | 21 | 179 | 1,111 | 3,504 | 6,592 |
| | December | 57 | 809 | 746 | 7 | 148 | 351 | 12 | 291 | 1,304 | 3,724 | 6,700 |
| | **Average** | 37 | 807 | 699 | 25 | 125 | 350 | 21 | 244 | 1,080 | 3,387 | 6,224 |
| 1987 | January | 59 | 799 | 689 | 29 | 100 | 384 | 33 | 327 | 1,170 | 3,589 | 6,353 |
| | February | 56 | 783 | 692 | 23 | 127 | 260 | 24 | 296 | 938 | 3,199 | 5,984 |
| | March | 43 | 738 | 721 | 14 | 124 | 322 | 17 | 247 | 1,262 | 3,489 | 5,794 |
| | April | 43 | 818 | 679 | 12 | 123 | 485 | 24 | 259 | 1,037 | 3,481 | 5,911 |
| | May | 31 | 884 | 541 | 33 | 117 | 392 | 21 | 214 | 1,164 | 3,398 | 6,073 |
| | June | 22 | 912 | 664 | 13 | 114 | 377 | 21 | 281 | 1,242 | 3,646 | 6,769 |
| | July | 46 | 901 | 680 | 71 | 98 | 354 | 17 | 288 | 1,598 | 4,055 | 7,588 |
| | August | 27 | 841 | 577 | 51 | 100 | 289 | 20 | 274 | 1,526 | 3,706 | 7,454 |
| | September | 48 | 846 | 705 | 42 | 105 | 259 | 25 | 271 | 1,318 | 3,618 | 7,178 |
| | October | 26 | 938 | 697 | 16 | 88 | 321 | 17 | 250 | 1,138 | 3,492 | 7,068 |
| | November | 31 | 827 | 627 | 14 | 111 | 456 | 15 | 235 | 1,585 | 3,899 | 7,068 |
| | December | 10 | 883 | 591 | 24 | 73 | 324 | 23 | 327 | 1,543 | 3,800 | 6,833 |
| | **Average** | 37 | 848 | 655 | 29 | 106 | 352 | 21 | 272 | 1,296 | 3,617 | 6,678 |
| 1988 | January | 49 | 953 | 767 | 40 | 104 | 312 | 29 | 341 | 1,205 | 3,800 | 6,900 |
| | February | 58 | 995 | 699 | 21 | 93 | 313 | 16 | 200 | 1,206 | 3,601 | 6,995 |
| | March | 45 | 989 | 745 | 30 | 89 | 461 | 22 | 180 | 1,160 | 3,720 | 6,727 |
| | April | 12 | 975 | 674 | 31 | 82 | 581 | 29 | 193 | 1,137 | 3,714 | 7,050 |
| | May | 17 | 990 | 718 | 38 | 102 | 383 | 20 | 243 | 1,345 | 3,855 | 7,218 |
| | June | 25 | 1,022 | 765 | 19 | 112 | 232 | 13 | 212 | 1,094 | 3,494 | 6,885 |
| | July | 15 | 962 | 723 | 35 | 96 | 208 | 22 | 215 | 1,280 | 3,556 | 6,994 |
| | August | 12 | 1,003 | 692 | 20 | 97 | 104 | 7 | 172 | 1,465 | 3,571 | 7,174 |
| | September | 25 | 920 | 842 | 13 | 95 | 148 | 29 | 236 | 1,307 | 3,617 | 7,220 |
| | October | 11 | 939 | 743 | 17 | 98 | 447 | 21 | 234 | 1,370 | 3,881 | 7,666 |
| | **10-Mo. Average** | 27 | 975 | 737 | 26 | 97 | 319 | 21 | 223 | 1,258 | 3,682 | 7,084 |
| 1987 | **10-Mo. Average** | 40 | 847 | 664 | 31 | 109 | 345 | 22 | 271 | 1,243 | 3,571 | 6,623 |
| 1986 | **10-Mo. Average** | 35 | 791 | 707 | 25 | 122 | 341 | 23 | 245 | 1,054 | 3,341 | 6,139 |

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Footnotes continued.

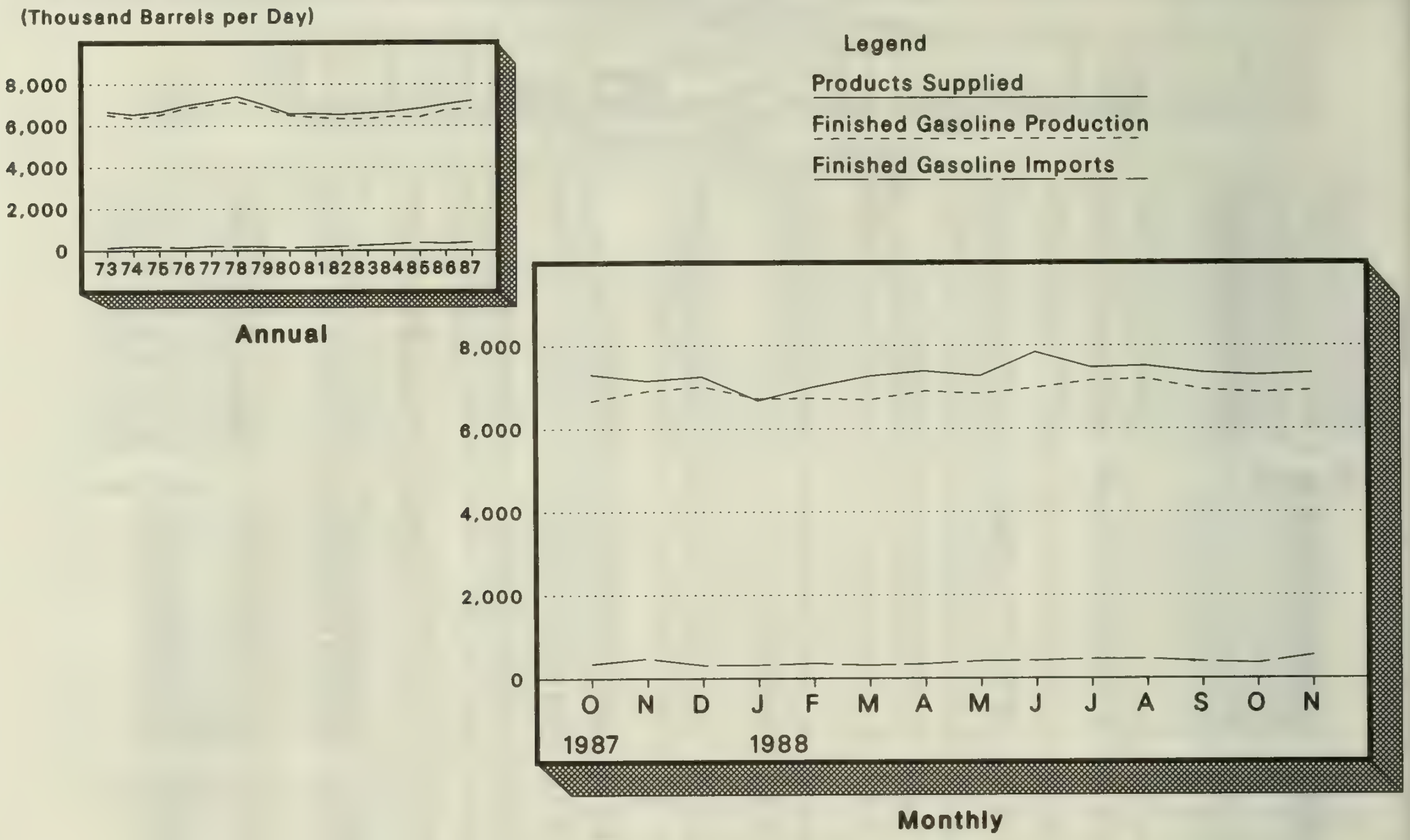
[6] Includes petroleum imported into the United States indirectly from members of OPEC, primarily from Caribbean and West European areas as petroleum products that were refined from crude oil produced by OPEC.

(s) = Less than 500 barrels per day.

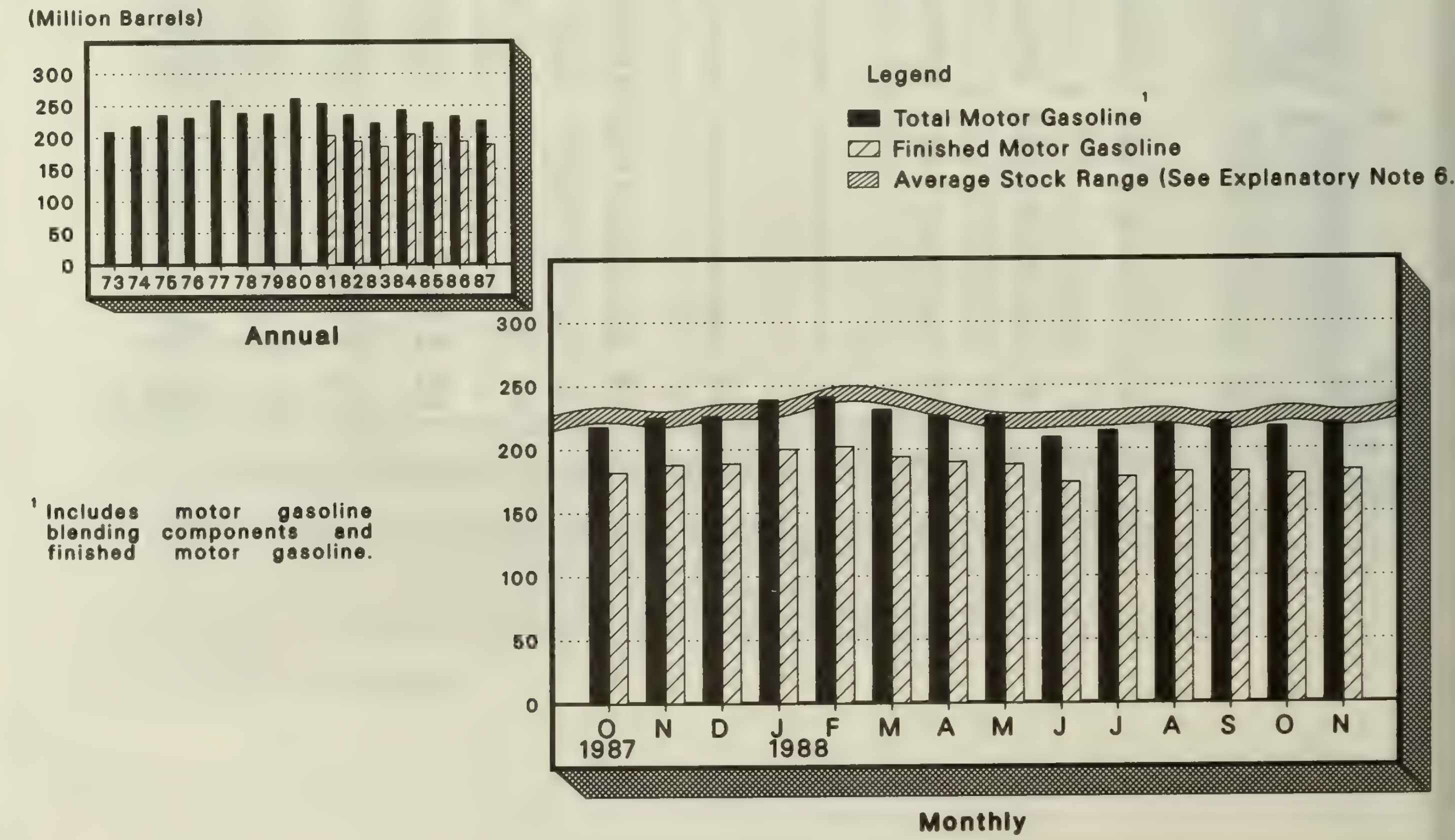
Notes: • Beginning in October 1977, Strategic Petroleum Reserve imports are included. • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: See the last page of this section.

## Figure S5. Finished Motor Gasoline Supply and Disposition



## Figure S6. Motor Gasoline Ending Stocks



[1] Includes motor gasoline blending components and finished motor gasoline.

# Table S4. Finished Motor Gasoline Supply and Disposition

| | | Supply | | | Disposition | | | | Ending Stocks [1] | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Product Supplied | | | | |
| | | Total Production | Imports [2] | Stock Withdrawal [2,3] | Exports | Total [4] | Unleaded | Unleaded | Total Motor Gasoline [5] | Finished Motor Gasoline |
| | | Thousand Barrels per Day | | | | | | Percent of Total | Million Barrels | |
| 1973 | **Average** | **6,535** | 134 | 9 | 4 | 6,674 | -- | -- | 209 | -- |
| 1974 | **Average** | **6,360** | 204 | -24 | 2 | 6,537 | -- | -- | [6] 218 | -- |
| 1975 | **Average** | **6,520** | 184 | [6] -28 | 2 | 6,675 | -- | -- | 235 | -- |
| 1976 | **Average** | **6,841** | 131 | 10 | 3 | 6,978 | -- | -- | 231 | – |
| 1977 | **Average** | **7,033** | 217 | -72 | 2 | 7,177 | 1,976 | 27.5 | 258 | -- |
| 1978 | **Average** | **7,169** | 190 | 54 | 1 | 7,412 | 2,521 | 34.0 | 238 | -- |
| 1979 | **Average** | **6,852** | 181 | 2 | (s) | 7,034 | 2,798 | 39.8 | 237 | -- |
| 1980 | **Average** | **6,506** | 140 | -66 | 1 | 6,579 | 3,067 | 46.6 | [6] 261 | -- |
| 1981 | **Average**[7] | **6,405** | 157 | [6] 28 | 2 | 6,588 | 3,264 | 49.5 | 253 | -- |
| 1982 | **Average** | **6,338** | 197 | 25 | 20 | 6,539 | 3,409 | 52.1 | [6] 235 | -- |
| 1983 | **Average** | **6,340** | 247 | [6] 45 | 10 | 6,622 | 3,647 | 55.1 | 222 | 186 |
| 1984 | **Average** | **6,453** | 299 | -54 | 8 | 6,693 | 3,987 | 59.6 | 243 | 205 |
| 1985 | **Average** | **6,419** | 381 | 41 | 10 | 6,831 | 4,406 | 64.5 | 223 | 190 |
| 1986 | January | 6,522 | 332 | -347 | 6 | 6,502 | 4,404 | 67.7 | 238 | 201 |
| | February | 6,302 | 334 | -156 | 11 | 6,469 | 4,365 | 67.5 | 244 | 205 |
| | March | 6,061 | 224 | 691 | 21 | 6,955 | 4,678 | 67.3 | 219 | 184 |
| | April | 6,498 | 291 | 338 | 23 | 7,105 | 4,783 | 67.3 | 207 | 174 |
| | May | 7,095 | 471 | -450 | 9 | 7,106 | 4,729 | 66.5 | 221 | 188 |
| | June | 7,101 | 392 | -265 | 18 | 7,209 | 4,914 | 68.2 | 230 | 196 |
| | July | 6,956 | 337 | 189 | 47 | 7,436 | 5,182 | 69.7 | 224 | 190 |
| | August | 7,092 | 303 | 83 | 43 | 7,435 | 5,138 | 69.1 | 222 | 187 |
| | September | 6,891 | 303 | -289 | 40 | 6,864 | 4,813 | 70.1 | 234 | 196 |
| | October | 6,616 | 322 | 372 | 61 | 7,250 | 5,086 | 70.1 | 222 | 184 |
| | November | 6,895 | 280 | -200 | 96 | 6,879 | 4,918 | 71.5 | 229 | 190 |
| | December | 6,970 | 320 | -122 | 24 | 7,143 | 5,193 | 72.7 | 233 | 194 |
| | **Average** | **6,752** | **326** | **-11** | **33** | **7,034** | **4,854** | **69.0** | -- | -- |
| 1987 | January | 6,714 | 393 | -528 | 44 | 6,535 | 4,822 | 73.8 | 251 | 211 |
| | February | 6,365 | 309 | 144 | 22 | 6,796 | 5,068 | 74.6 | 250 | 207 |
| | March | 6,569 | 364 | 51 | 20 | 6,964 | 5,193 | 74.6 | 248 | 205 |
| | April | 6,850 | 374 | 133 | 42 | 7,314 | 5,405 | 73.9 | 242 | 201 |
| | May | 6,991 | 354 | 164 | 48 | 7,460 | 5,569 | 74.7 | 235 | 196 |
| | June | 7,089 | 385 | 111 | 46 | 7,539 | 5,678 | 75.3 | 230 | 193 |
| | July | 7,043 | 452 | 119 | 33 | 7,581 | 5,740 | 75.7 | 226 | 189 |
| | August | 6,933 | 396 | 29 | 19 | 7,338 | 5,656 | 77.1 | 226 | 188 |
| | September | 6,921 | 421 | -107 | 30 | 7,205 | 5,536 | 76.8 | 230 | 191 |
| | October | 6,668 | 356 | 302 | 21 | 7,305 | 5,636 | 77.1 | 218 | 182 |
| | November | 6,907 | 484 | -208 | 32 | 7,151 | 5,589 | 78.2 | 225 | 188 |
| | December | 7,015 | 320 | -24 | 59 | 7,251 | 5,715 | 78.8 | 226 | 189 |
| | **Average** | **6,841** | **384** | **15** | **35** | **7,206** | **5,470** | **75.9** | – | – |
| 1988 | January | 6,723 | 324 | -361 | 8 | 6,679 | 5,392 | 80.7 | 239 | 200 |
| | February | 6,736 | 365 | -78 | 18 | 7,004 | 5,571 | 79.5 | 241 | 202 |
| | March | 6,695 | 318 | 271 | 18 | 7,265 | 5,845 | 80.4 | 231 | 194 |
| | April | 6,906 | 349 | 148 | 18 | 7,384 | 5,946 | 80.5 | 226 | 190 |
| | May | 6,847 | 415 | 34 | 28 | 7,269 | 5,813 | 80.0 | 226 | 188 |
| | June | 6,983 | 424 | 490 | 59 | 7,838 | 6,356 | 81.1 | 209 | 174 |
| | July | 7,159 | 461 | -135 | 12 | 7,473 | 6,126 | 82.0 | 214 | 178 |
| | August | 7,204 | 465 | -142 | 15 | 7,511 | 6,191 | 82.4 | 219 | 182 |
| | September | 6,948 | 403 | 14 | 16 | 7,349 | 6,066 | 82.5 | 221 | 182 |
| | October* | R 6,875 | R 363 | R 63 | R 13 | R 7,287 | R 5,992 | R 82.2 | R 217 | R 180 |
| | November** | E *6,923* | E *554* | E *-119* | E 16 | E *7,341* | E *6,231* | E *84.9* | E *220* | E *183* |
| | **11-Mo. Average** | E **6,910** | E **404** | E **16** | E **20** | E **7,309** | E **5,957** | E **81.5** | – | – |
| 1987 | **11-Mo. Average** | **6,825** | **390** | **18** | **33** | **7,202** | **5,447** | **75.6** | – | – |
| 1986 | **11-Mo. Average** | **6,732** | **326** | **(s)** | **34** | **7,024** | **4,823** | **68.6** | – | – |

[1] Stocks are totals as of end of period.

[2] Beginning in 1981, excludes blending components.

[3] A negative number indicates an increase in stocks and a positive number indicates a decrease.

[4] Includes gasohol.

[5] Includes motor gasoline blending components.

[6] In January 1975, 1981, and 1983, numerous respondents were added to surveys affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10.

[7] Beginning in January 1981, survey forms were modified. See Explanatory Note 12.

R = Revised data. (s) = Less than 500 barrels per day. E = Estimated.

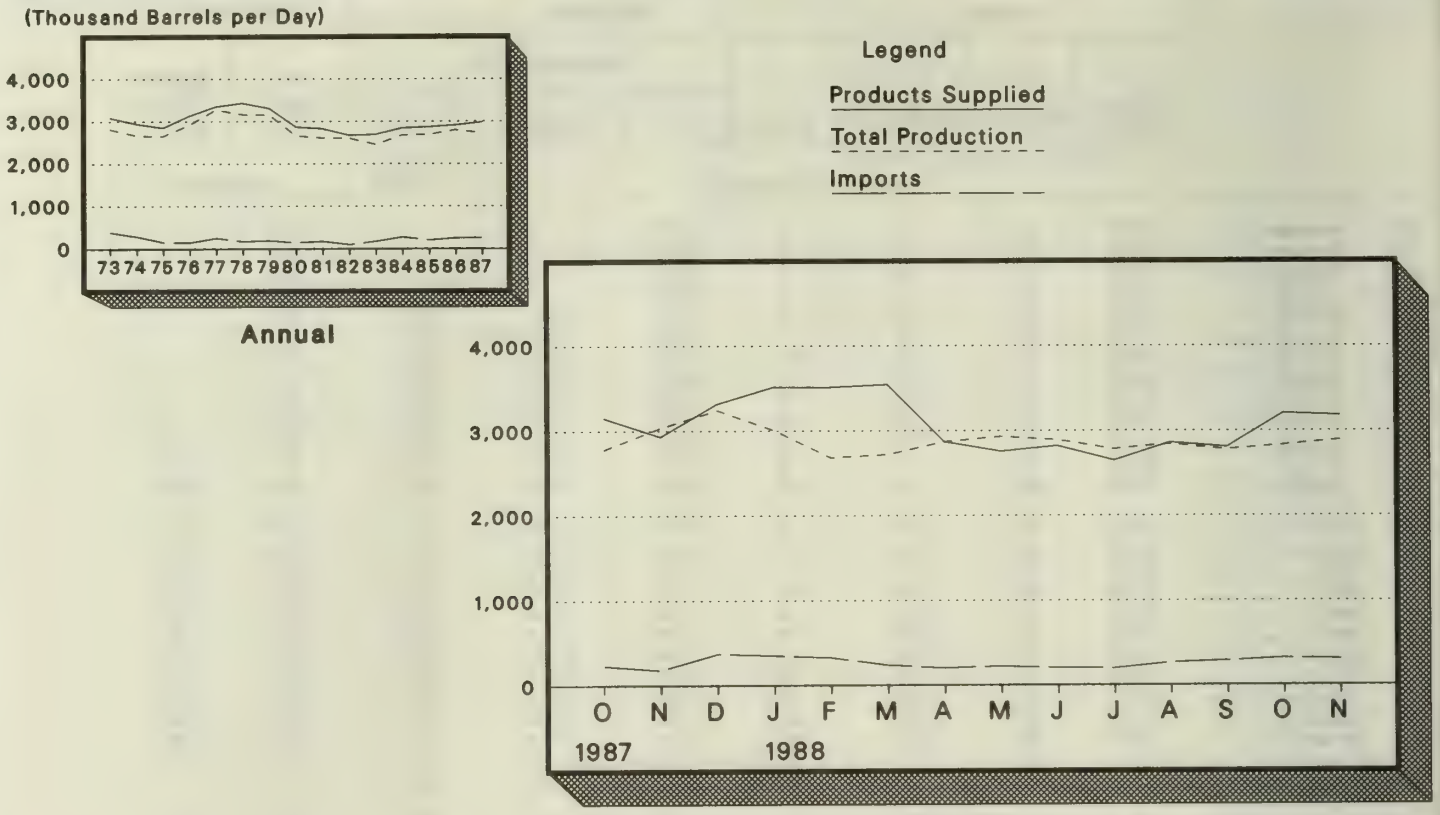
* See Explanatory Note 9.3.

** Italics denote estimates based upon preliminary data. See Explanatory Note 8.

Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: See the last page of this section.

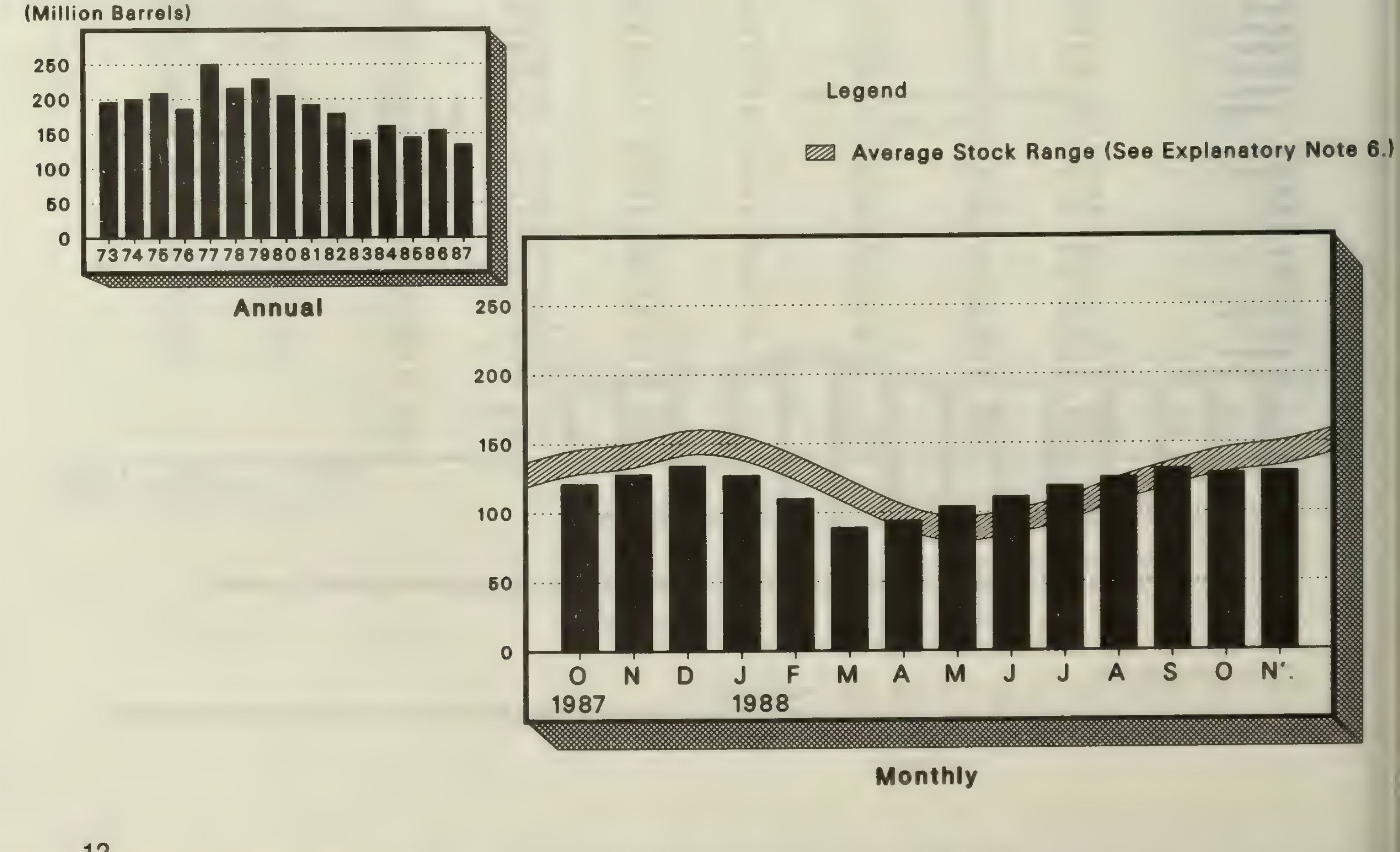
## Figure S7. Distillate Fuel Oil Supply and Disposition



Annual

Monthly

## Figure S8. Distillate Fuel Oil Ending Stocks



Annual

Monthly

## Table S5. Distillate Fuel Oil Supply and Disposition

| | | Supply | | | | Disposition | | |
|---|---|---|---|---|---|---|---|---|
| | | Total Production | Imports | Stock Withdrawal [1] | Crude Used Directly [2] | Exports | Product Supplied [2] | Ending Stocks [3] |
| | | Thousand Barrels per Day | | | | | | Million Barrels |
| 1973 | **Average** | **2,822** | **392** | **-115** | **2** | **9** | **3,092** | **196** |
| 1974 | **Average** | **2,669** | **289** | **-9** | **2** | **2** | **2,948** | [4] **200** |
| 1975 | **Average** | **2,654** | **155** | [4] **40** | **2** | **1** | **2,851** | **209** |
| 1976 | **Average** | **2,924** | **146** | **62** | **1** | **1** | **3,133** | **186** |
| 1977 | **Average** | **3,278** | **250** | **-176** | **1** | **1** | **3,352** | **250** |
| 1978 | **Average** | **3,167** | **173** | **93** | **1** | **3** | **3,432** | **216** |
| 1979 | **Average** | **3,153** | **193** | **-34** | **1** | **3** | **3,311** | **229** |
| 1980 | **Average** | **2,662** | **142** | **64** | **1** | **3** | **2,866** | [4] **205** |
| 1981 | **Average**[5] | **2,613** | **173** | [4] **38** | **10** | **5** | **2,829** | **192** |
| 1982 | **Average** | **2,606** | **93** | **35** | **10** | **74** | **2,671** | [4] **179** |
| 1983 | **Average** | **2,456** | **174** | [4] **124** | **--** | **64** | **2,690** | **140** |
| 1984 | **Average** | **2,681** | **272** | **-57** | **--** | **51** | **2,845** | **161** |
| 1985 | **Average** | **2,687** | **200** | **48** | **--** | **67** | **2,868** | **144** |
| 1986 | January | 2,899 | 325 | 232 | -- | 126 | 3,330 | 136 |
| | February | 2,563 | 169 | 860 | -- | 176 | 3,416 | 112 |
| | March | 2,643 | 217 | 438 | -- | 131 | 3,168 | 99 |
| | April | 2,788 | 147 | 97 | -- | 128 | 2,904 | 96 |
| | May | 2,858 | 149 | -95 | -- | 149 | 2,762 | 99 |
| | June | 2,729 | 169 | -301 | -- | 53 | 2,544 | 108 |
| | July | 2,710 | 313 | -355 | -- | 75 | 2,592 | 119 |
| | August | 2,922 | 370 | -607 | -- | 64 | 2,621 | 138 |
| | September | 2,865 | 262 | -489 | -- | 98 | 2,540 | 152 |
| | October | 2,717 | 243 | 25 | -- | 74 | 2,912 | 152 |
| | November | 2,917 | 254 | -222 | -- | 72 | 2,877 | 158 |
| | December | 2,943 | 339 | 102 | -- | 55 | 3,329 | 155 |
| | **Average** | **2,798** | **247** | **-31** | **--** | **100** | **2,914** | -- |
| 1987 | January | 2,759 | 222 | 444 | -- | 115 | 3,310 | 141 |
| | February | 2,556 | 253 | 629 | -- | 93 | 3,345 | 124 |
| | March | 2,421 | 297 | 464 | -- | 67 | 3,116 | 109 |
| | April | 2,553 | 192 | 300 | -- | 53 | 2,991 | 100 |
| | May | 2,563 | 203 | -31 | -- | 51 | 2,684 | 101 |
| | June | 2,689 | 265 | -104 | -- | 61 | 2,790 | 104 |
| | July | 2,700 | 381 | -329 | -- | 38 | 2,713 | 115 |
| | August | 2,706 | 222 | -327 | -- | 47 | 2,553 | 125 |
| | September | 2,748 | 222 | -68 | -- | 64 | 2,838 | 127 |
| | October | 2,780 | 237 | 187 | -- | 53 | 3,151 | 121 |
| | November | 3,035 | 187 | -234 | -- | 56 | 2,932 | 128 |
| | December | 3,242 | 378 | -209 | -- | 92 | 3,318 | 134 |
| | **Average** | **2,731** | **255** | **56** | **--** | **66** | **2,976** | -- |
| 1988 | January | 3,008 | 355 | 236 | -- | 82 | 3,517 | 127 |
| | February | 2,683 | 330 | 604 | -- | 107 | 3,511 | 110 |
| | March | 2,720 | 243 | 656 | -- | 74 | 3,544 | 89 |
| | April | 2,869 | 208 | -166 | -- | 42 | 2,870 | 94 |
| | May | 2,931 | 228 | -328 | -- | 74 | 2,757 | 104 |
| | June | 2,893 | 209 | -207 | -- | 76 | 2,820 | 111 |
| | July | 2,783 | 205 | -283 | -- | 58 | 2,647 | 119 |
| | August | 2,844 | 270 | -186 | -- | 70 | 2,860 | 125 |
| | September | 2,779 | 292 | -193 | -- | 72 | 2,806 | 131 |
| | October* | R 2,830 | R 324 | R 98 | -- | R 48 | R 3,204 | R 128 |
| | November** | E *2,890* | E *312* | E *46* | -- | E 71 | E *3,178* | E *129* |
| | **11-Mo. Average** | E **2,840** | E **271** | E **24** | **--** | E **70** | E **3,064** | -- |
| 1987 | **11-Mo. Average** | **2,683** | **244** | **81** | **--** | **63** | **2,945** | -- |
| 1986 | **11-Mo. Average** | **2,784** | **239** | **-44** | **--** | **104** | **2,876** | -- |

[1] A negative number indicates an increase in stocks and a positive number indicates a decrease.

[2] Beginning in January 1983, product supplied for distillate fuel oil does not include crude oil used directly. See Explanatory Note 4.

[3] Stocks are totals as of end of period.

[4] In January 1975, 1981, and 1983, numerous respondents were added to surveys affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10.

[5] Beginning in January 1981, survey forms were modified. See Explanatory Note 12.

R = Revised data. (s) = Less than 500 barrels per day. E = Estimated.

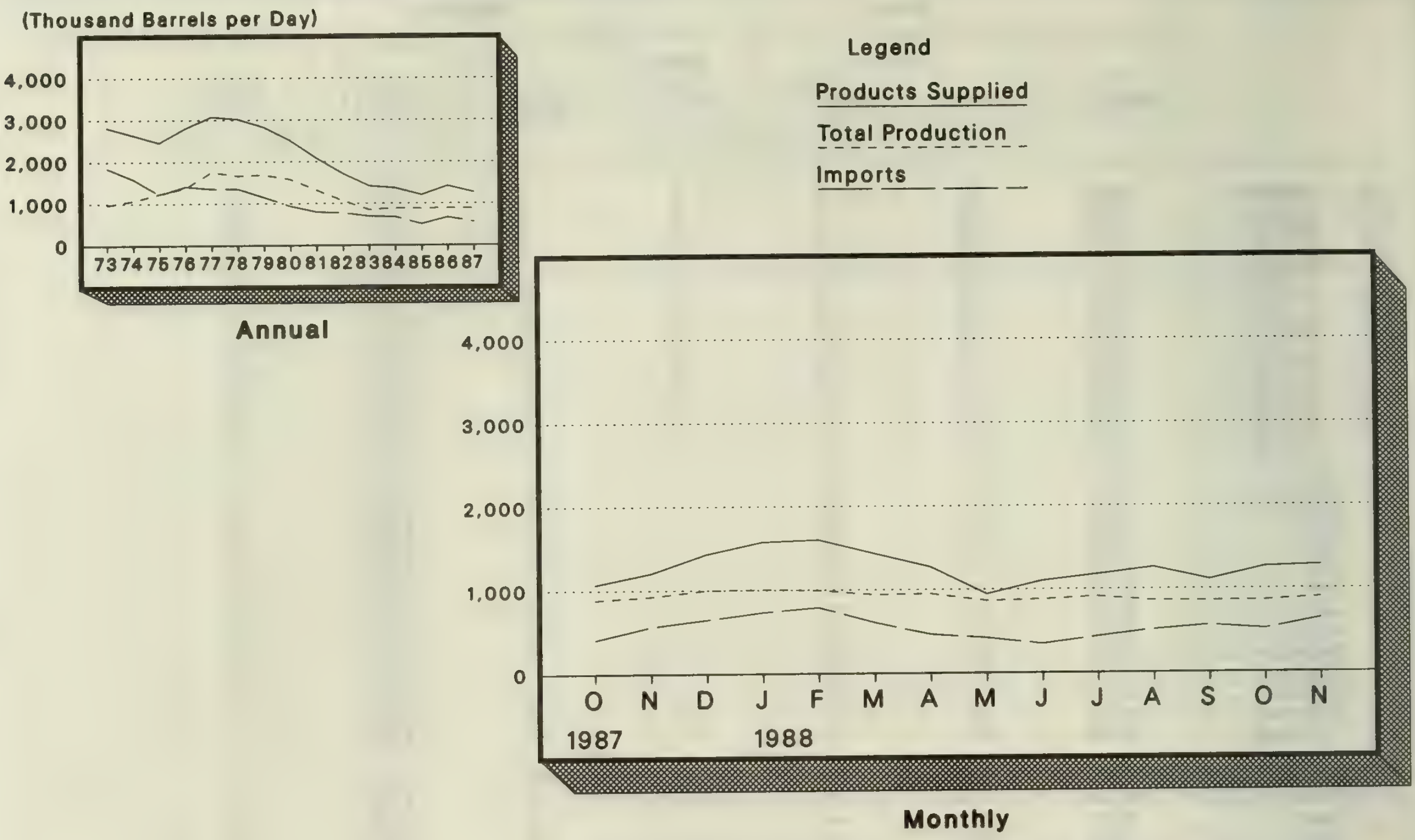
* See Explanatory Note 9.4.

** Italics denote estimates based upon preliminary data. See Explanatory Note 8.

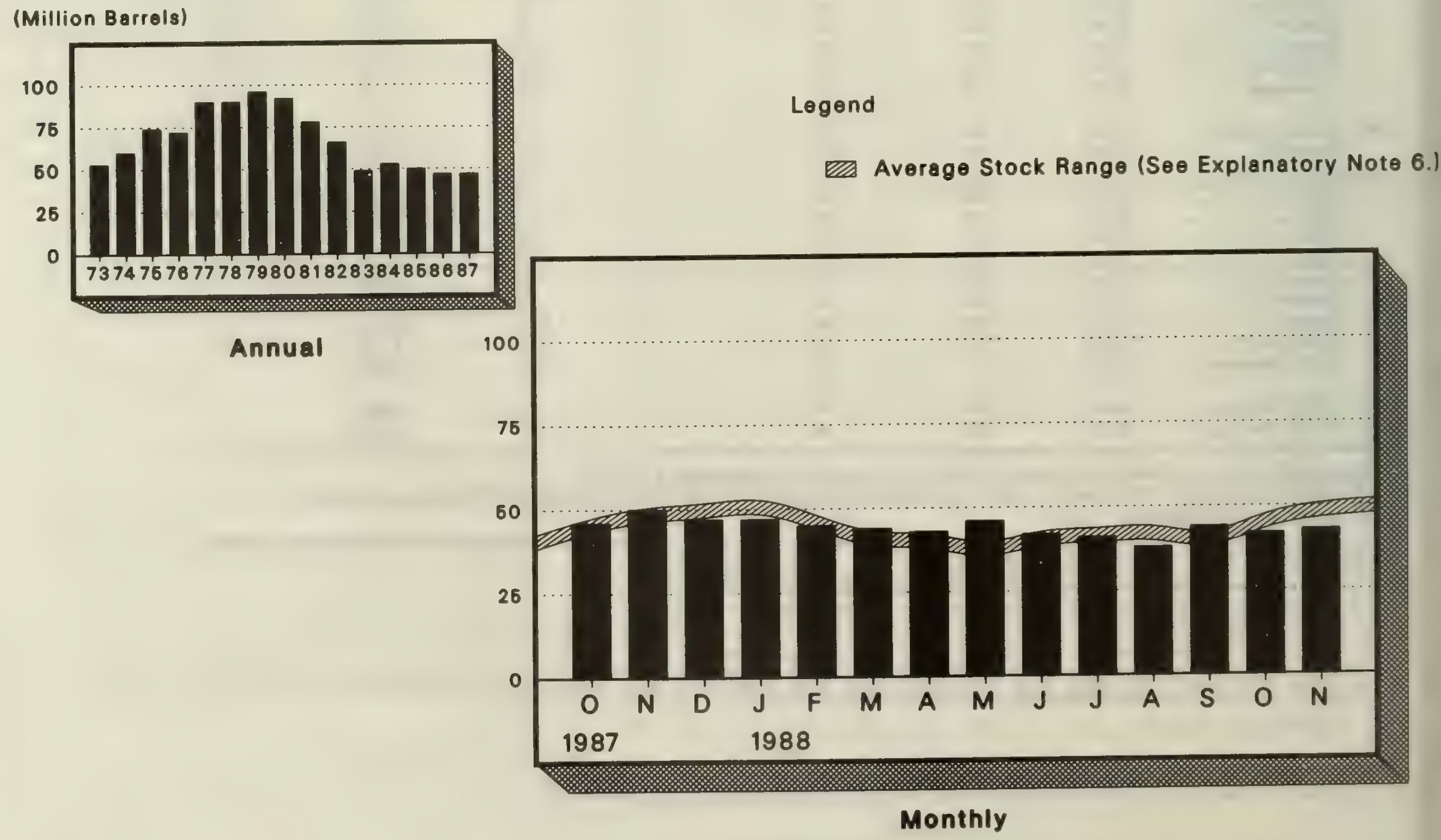
Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: See the last page of this section.

## Figure S9. Residual Fuel Oil Supply and Disposition



## Figure S10. Residual Fuel Oil Ending Stocks



# Table S6. Residual Fuel Oil Supply and Disposition

| | | Supply | | | | Disposition | | |
|---|---|---|---|---|---|---|---|---|
| | | Total Production | Imports | Stock Withdrawal [1] | Crude Used Directly [2] | Exports | Product Supplied [2] | Ending Stocks [3] |
| | | Thousand Barrels per Day | | | | | | Million Barrels |
| 1973 | **Average** | **971** | **1,853** | **5** | **17** | **23** | **2,822** | **53** |
| 1974 | **Average** | **1,070** | **1,587** | **-17** | **13** | **14** | **2,639** | [4] **60** |
| 1975 | **Average** | **1,235** | **1,223** | [4] **2** | **15** | **15** | **2,462** | **74** |
| 1976 | **Average** | **1,377** | **1,413** | **5** | **17** | **12** | **2,801** | **72** |
| 1977 | **Average** | **1,754** | **1,359** | **-48** | **13** | **6** | **3,071** | **90** |
| 1978 | **Average** | **1,667** | **1,355** | **-1** | **13** | **13** | **3,023** | **90** |
| 1979 | **Average** | **1,687** | **1,151** | **-15** | **12** | **9** | **2,826** | **96** |
| 1980 | **Average** | **1,580** | **939** | **10** | **12** | **33** | **2,508** | [4] **92** |
| 1981 | **Average**[5] | **1,321** | **800** | [4] **37** | **48** | **118** | **2,088** | **78** |
| 1982 | **Average** | **1,070** | **776** | **32** | **48** | **209** | **1,716** | [4] **66** |
| 1983 | **Average** | **852** | **699** | [4] **55** | **–** | **185** | **1,421** | **49** |
| 1984 | **Average** | **891** | **681** | **-12** | **–** | **190** | **1,369** | **53** |
| 1985 | **Average** | **882** | **510** | **7** | **–** | **197** | **1,202** | **50** |
| 1986 | January | 940 | 622 | 56 | -- | 211 | 1,407 | 49 |
| | February | 856 | 604 | 200 | -- | 183 | 1,478 | 43 |
| | March | 813 | 626 | 108 | -- | 113 | 1,435 | 40 |
| | April | 933 | 545 | 127 | -- | 202 | 1,402 | 36 |
| | May | 913 | 675 | -114 | -- | 129 | 1,345 | 39 |
| | June | 818 | 712 | -111 | -- | 43 | 1,377 | 43 |
| | July | 850 | 673 | 75 | -- | 90 | 1,508 | 40 |
| | August | 896 | 793 | -29 | -- | 174 | 1,485 | 41 |
| | September | 854 | 641 | -89 | -- | 110 | 1,296 | 44 |
| | October | 827 | 635 | -59 | -- | 144 | 1,259 | 46 |
| | November | 975 | 574 | -15 | -- | 143 | 1,391 | 46 |
| | December | 987 | 913 | -37 | -- | 224 | 1,638 | 47 |
| | **Average** | **889** | **669** | **8** | **--** | **147** | **1,418** | **–** |
| 1987 | January | 920 | 701 | 81 | -- | 198 | 1,504 | 45 |
| | February | 825 | 668 | 243 | -- | 221 | 1,515 | 38 |
| | March | 863 | 559 | -38 | -- | 150 | 1,234 | 39 |
| | April | 831 | 476 | 114 | -- | 239 | 1,182 | 36 |
| | May | 813 | 505 | -145 | -- | 144 | 1,029 | 40 |
| | June | 864 | 481 | -33 | -- | 105 | 1,207 | 41 |
| | July | 901 | 721 | -108 | -- | 175 | 1,339 | 45 |
| | August | 882 | 512 | -32 | -- | 185 | 1,176 | 46 |
| | September | 904 | 526 | 42 | -- | 177 | 1,296 | 44 |
| | October | 887 | 414 | -39 | -- | 194 | 1,069 | 46 |
| | November | 928 | 568 | -145 | -- | 146 | 1,205 | 50 |
| | December | 1,001 | 650 | 83 | -- | 300 | 1,434 | 47 |
| | **Average** | **885** | **565** | (s) | **--** | **186** | **1,264** | -- |
| 1988 | January | 1,009 | 737 | 23 | -- | 190 | 1,578 | 47 |
| | February | 997 | 792 | 40 | -- | 229 | 1,601 | 45 |
| | March | 944 | 610 | 45 | -- | 165 | 1,434 | 44 |
| | April | 951 | 465 | 27 | -- | 170 | 1,272 | 43 |
| | May | 866 | 423 | -81 | -- | 263 | 945 | 46 |
| | June | 881 | 349 | 121 | -- | 249 | 1,102 | 42 |
| | July | 913 | 436 | 34 | -- | 206 | 1,177 | 41 |
| | August | 863 | 515 | 104 | -- | 225 | 1,258 | 38 |
| | September | 859 | 566 | -213 | -- | 100 | 1,112 | 44 |
| | October* | R 863 | R 522 | R 59 | -- | R 181 | R 1,263 | R 42 |
| | November** | E *898* | E *645* | E *-89* | -- | E 171 | E *1,283* | E *43* |
| | **11-Mo. Average** | E **913** | E **550** | E 7 | **--** | E **195** | E **1,274** | -- |
| 1987 | **11-Mo. Average** | **875** | **557** | **-8** | **–** | **175** | **1,249** | -- |
| 1986 | **11-Mo. Average** | **880** | **646** | **12** | **--** | **140** | **1,398** | -- |

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[1] A negative number indicates an increase in stocks and a positive number indicates a decrease.

[2] Beginning in January 1983, product supplied for residual fuel oil does not include crude oil used directly. See Explanatory Note 4.

[3] Stocks are totals as of end of period.

[4] In January 1975, 1981, and 1983, numerous respondents were added to surveys affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10.

[5] Beginning in January 1981, survey forms were modified. See Explanatory Note 12.

R = Revised data. (s) = Less than 500 barrels per day. E = Estimated.

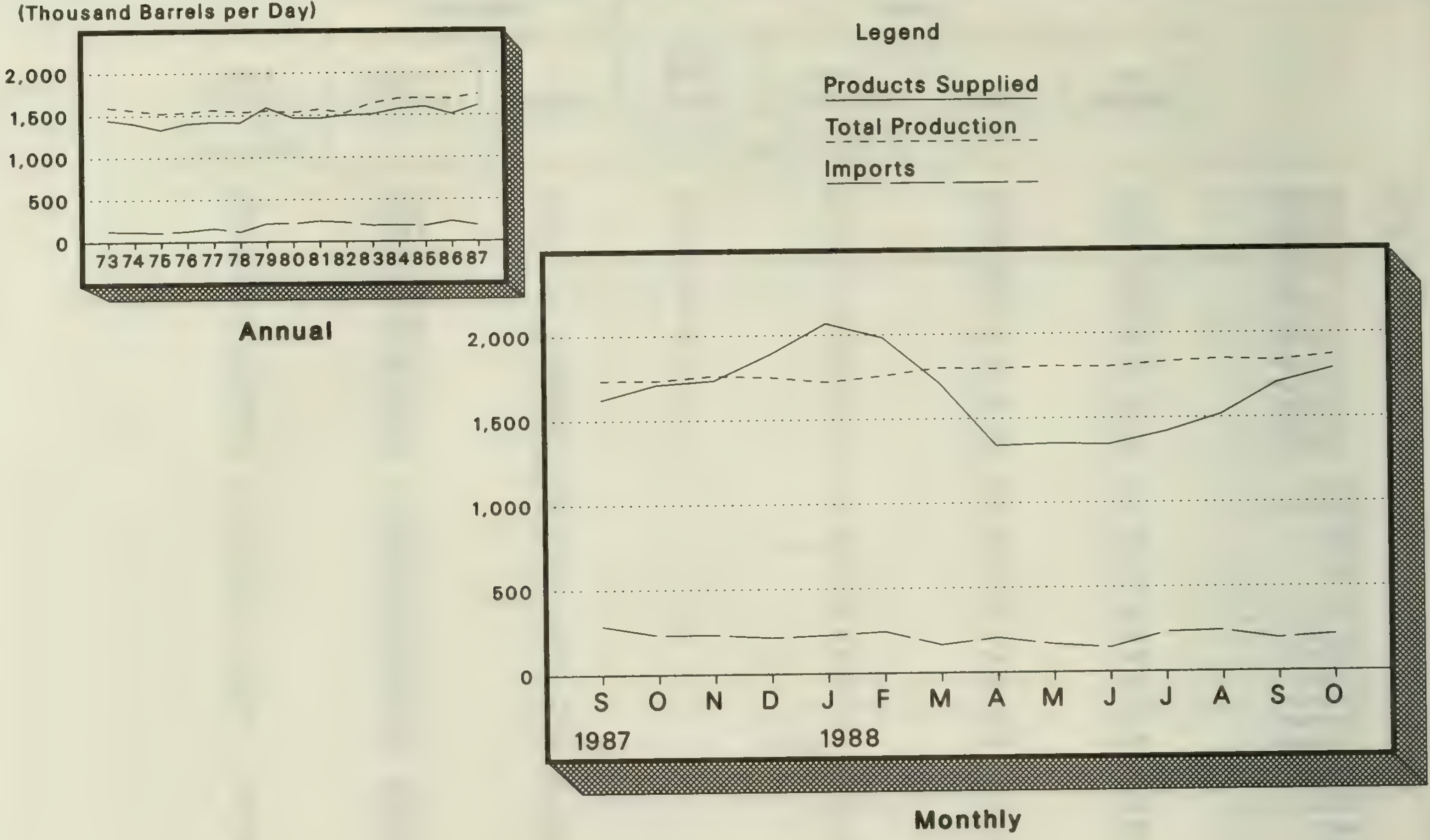
* See Explanatory Note 9.4.

** Italics denote estimates based upon preliminary data. See Explanatory Note 8.

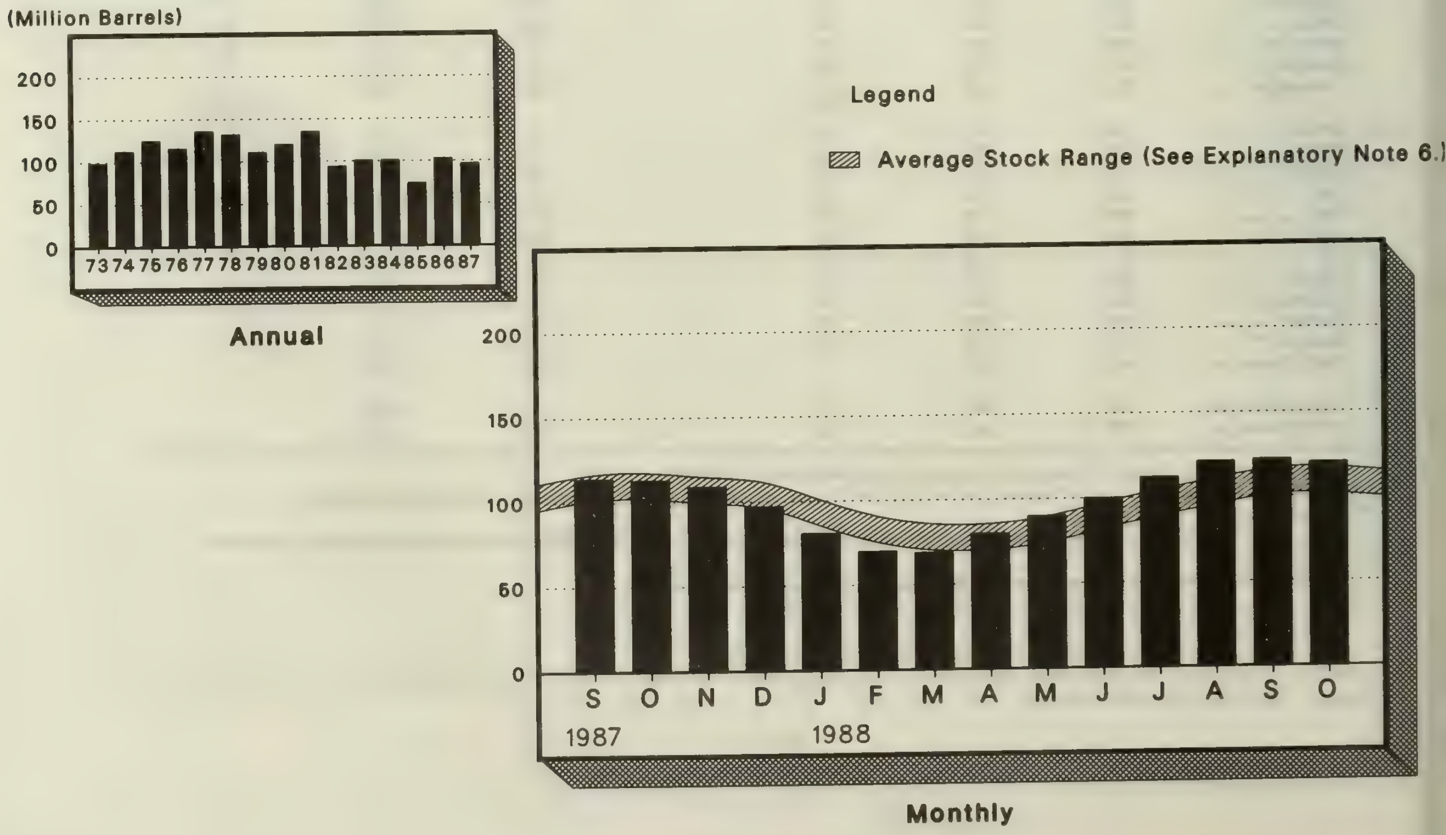
Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: See the last page of this section.

## Figure S11. Liquefied Petroleum Gases Supply and Disposition



## Figure S12. Liquefied Petroleum Gases Ending Stocks



# Table S7. Liquefied Petroleum Gases[1] Supply and Disposition

| | | Supply | | | Disposition | | | |
|---|---|---|---|---|---|---|---|---|
| | | Total Production | Imports | Stock Withdrawal [2] | Refinery Inputs | Exports | Product Supplied | Ending Stocks [3] |
| | | Thousand Barrels per Day | | | | | | Million Barrels |
| 1973 | **Average** | **1,600** | **132** | -35 | 220 | **27** | **1,449** | **99** |
| 1974 | **Average** | **1,565** | **123** | -38 | 220 | **25** | **1,406** | [4] **113** |
| 1975 | **Average** | **1,527** | **112** | [4] -35 | 246 | **26** | **1,333** | **125** |
| 1976 | **Average** | **1,535** | **130** | 24 | 260 | **25** | **1,404** | **116** |
| 1977 | **Average** | **1,566** | **161** | -55 | 233 | **18** | **1,422** | **136** |
| 1978 | **Average** | **1,537** | **123** | 12 | 239 | **20** | **1,413** | **132** |
| 1979 | **Average** | **1,556** | **217** | 70 | 236 | **15** | **1,592** | **111** |
| 1980 | **Average** | **1,535** | **216** | -27 | 233 | **21** | **1,469** | [4] **120** |
| 1981 | **Average** | **1,571** | **244** | [4] -18 | 289 | **42** | **1,466** | **135** |
| 1982 | **Average** | **1,528** | **226** | 111 | 300 | **65** | **1,499** | [4] **94** |
| 1983 | **Average** | **1,642** | **190** | [4] 4 | 253 | **73** | **1,509** | [4] **101** |
| 1984 | **Average** | **1,697** | **195** | [4] 19 | 291 | **48** | **1,572** | **101** |
| 1985 | **Average** | **1,704** | **187** | 75 | 304 | **62** | **1,599** | **74** |
| 1986 | January | 1,850 | 280 | 80 | 364 | 47 | 1,800 | 71 |
| | February | 1,815 | 208 | 108 | 325 | 74 | 1,733 | 68 |
| | March | 1,693 | 202 | -98 | 250 | 47 | 1,500 | 71 |
| | April | 1,642 | 134 | -200 | 256 | 33 | 1,286 | 77 |
| | May | 1,685 | 196 | -336 | 267 | 40 | 1,238 | 87 |
| | June | 1,649 | 253 | -490 | 228 | 25 | 1,158 | 102 |
| | July | 1,684 | 303 | -450 | 199 | 50 | 1,287 | 116 |
| | August | 1,619 | 271 | -332 | 243 | 53 | 1,262 | 126 |
| | September | 1,631 | 282 | -142 | 288 | 27 | 1,456 | 131 |
| | October | 1,625 | 234 | 249 | 332 | 26 | 1,750 | 123 |
| | November | 1,724 | 310 | 254 | 417 | 53 | 1,817 | 115 |
| | December | 1,725 | 227 | 411 | 456 | 33 | 1,875 | 103 |
| | **Average** | **1,695** | **242** | -80 | **302** | **42** | **1,512** | – |
| 1987 | January | 1,751 | 183 | 500 | 419 | 43 | 1,971 | 87 |
| | February | 1,762 | 201 | 205 | 341 | 38 | 1,789 | 81 |
| | March | 1,761 | 132 | -10 | 282 | 52 | 1,550 | 82 |
| | April | 1,775 | 149 | -121 | 274 | 36 | 1,493 | 85 |
| | May | 1,732 | 142 | -283 | 269 | 34 | 1,288 | 94 |
| | June | 1,732 | 119 | -175 | 255 | 22 | 1,400 | 99 |
| | July | 1,764 | 190 | -145 | 244 | 30 | 1,534 | 104 |
| | August | 1,717 | 198 | -259 | 252 | 33 | 1,372 | 112 |
| | September | 1,736 | 288 | -81 | 266 | 56 | 1,622 | 114 |
| | October | 1,736 | 233 | 59 | 294 | 23 | 1,711 | 113 |
| | November | 1,763 | 233 | 129 | 356 | 35 | 1,735 | 109 |
| | December | 1,753 | 214 | 372 | 395 | 56 | 1,887 | 97 |
| | **Average** | **1,748** | **190** | 15 | **304** | **38** | **1,612** | – |
| 1988 | January | 1,723 | 226 | 529 | 366 | 44 | 2,069 | 81 |
| | February | 1,757 | 245 | 364 | 336 | 47 | 1,982 | 70 |
| | March | 1,802 | 165 | 45 | 266 | 36 | 1,710 | 69 |
| | April | 1,796 | 205 | -362 | 256 | 43 | 1,339 | 80 |
| | May | 1,809 | 165 | -333 | 253 | 37 | 1,350 | 90 |
| | June | 1,804 | 144 | -333 | 234 | 38 | 1,343 | 100 |
| | July | 1,831 | 233 | -384 | 228 | 35 | 1,416 | 112 |
| | August | 1,848 | 241 | -281 | 241 | 50 | 1,517 | 121 |
| | September | 1,837 | 194 | -34 | 251 | 43 | 1,704 | 122 |
| | October* | 1,869 | 216 | 55 | 296 | 56 | 1,787 | 120 |
| | **10-Mo. Average** | **1,808** | **203** | -75 | **273** | **43** | **1,621** | – |
| 1987 | **10-Mo. Average** | **1,746** | **183** | -32 | **289** | **37** | **1,571** | – |
| 1986 | **10-Mo. Average** | **1,689** | **237** | -163 | **275** | **42** | **1,446** | – |

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[1] Includes ethane, propane, normal butane, and isobutane. Beginning in January 1984, unfractionated stream is reported by individual product.

[2] A negative number indicates an increase in stocks and a positive number indicates a decrease.

[3] Stocks are totals as of end of period.

[4] In January 1975, 1981, 1983, and 1984, a new stock basis was established affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10.

* See Explanatory Note 9.5.

Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: See the last page of this section.

# Table S8. Other Petroleum Products[1] Supply and Disposition

| | | Supply | | | Disposition | | | |
|---|---|---|---|---|---|---|---|---|
| | | Total Production | Imports | Stock Withdrawal[2] | Refinery Inputs | Exports | Product Supplied | Ending Stocks[3] |
| | | Thousand Barrels per Day | | | | | | Million Barrels |
| 1973 | **Average** | **3,693** | **502** | **-9** | **750** | **166** | **3,270** | **208** |
| 1974 | **Average** | **3,558** | **432** | **-28** | **665** | **174** | **3,123** | **[4]218** |
| 1975 | **Average** | **3,418** | **277** | **[4]4** | **537** | **160** | **3,002** | **219** |
| 1976 | **Average** | **3,643** | **206** | **-5** | **524** | **175** | **3,145** | **220** |
| 1977 | **Average** | **3,912** | **205** | **-27** | **514** | **165** | **3,410** | **230** |
| 1978 | **Average** | **4,046** | **166** | **14** | **492** | **167** | **3,568** | **225** |
| 1979 | **Average** | **4,153** | **195** | **-37** | **352** | **209** | **3,749** | **238** |
| 1980 | **Average** | **3,956** | **210** | **-23** | **311** | **198** | **3,634** | **[4]247** |
| 1981 | **Average** | **3,739** | **226** | **[4]46** | **723** | **199** | **3,088** | **282** |
| 1982 | **Average** | **3,453** | **334** | **80** | **787** | **211** | **2,869** | **[4]253** |
| 1983 | **Average** | **3,460** | **411** | **[4]6** | **712** | **242** | **2,923** | **[4]256** |
| 1984 | **Average** | **3,632** | **565** | **[4]23** | **791** | **245** | **3,183** | **240** |
| 1985 | **Average** | **3,721** | **588** | **-17** | **886** | **240** | **3,166** | **246** |
| 1986 | January | 3,902 | 541 | [5]-172 | 967 | 311 | 2,993 | 252 |
| | February | 3,868 | 393 | -209 | 747 | 270 | 3,035 | [5]258 |
| | March | 3,754 | 454 | [5]21 | 854 | 208 | 3,167 | 257 |
| | April | 3,788 | 638 | -100 | 760 | 369 | 3,196 | 260 |
| | May | 4,055 | 659 | -114 | 810 | 298 | 3,492 | [5]264 |
| | June | 4,209 | 687 | [5]-70 | 853 | 263 | 3,710 | 266 |
| | July | 4,145 | 589 | [5]119 | 1,064 | 357 | 3,432 | 262 |
| | August | 4,223 | 572 | 335 | 1,061 | 301 | 3,768 | [5]252 |
| | September | 4,225 | 571 | [5]35 | 846 | 278 | 3,708 | [5]251 |
| | October | 3,969 | 575 | [5]-112 | 666 | 375 | 3,391 | 254 |
| | November | 3,904 | 559 | [5]36 | 940 | 342 | 3,217 | 253 |
| | December | 3,920 | 490 | [5]90 | 1,069 | 325 | 3,105 | 250 |
| | **Average** | **3,997** | **561** | **-10** | **888** | **308** | **3,353** | **--** |
| 1987 | January | 3,852 | 469 | -121 | 659 | 219 | 3,323 | 254 |
| | February | 3,796 | 687 | -389 | 352 | 320 | 3,422 | 265 |
| | March | 3,766 | 663 | -128 | 757 | 281 | 3,262 | 269 |
| | April | 3,933 | 589 | 107 | 872 | 254 | 3,502 | 266 |
| | May | 4,049 | 529 | 178 | 913 | 320 | 3,523 | 260 |
| | June | 4,203 | 712 | 158 | 896 | 320 | 3,857 | 255 |
| | July | 4,363 | 550 | 91 | 835 | 256 | 3,913 | 253 |
| | August | 4,340 | 616 | -148 | 693 | 238 | 3,876 | 257 |
| | September | 4,350 | 611 | -24 | 903 | 353 | 3,681 | 258 |
| | October | 4,223 | 686 | 14 | 971 | 272 | 3,680 | 258 |
| | November | 4,010 | 583 | -20 | 975 | 305 | 3,294 | 258 |
| | December | 4,050 | 633 | 261 | 1,091 | 330 | 3,523 | 250 |
| | **Average** | **4,080** | **610** | **1** | **829** | **289** | **3,572** | **--** |
| 1988 | January | 3,988 | 639 | -143 | 785 | 354 | 3,345 | 254 |
| | February | 3,941 | 570 | -35 | 726 | 318 | 3,433 | 255 |
| | March | 4,175 | 603 | -269 | 656 | 328 | 3,525 | 264 |
| | April | 4,052 | 697 | -97 | 832 | 288 | 3,533 | 267 |
| | May | 4,097 | 752 | -341 | 471 | 274 | 3,763 | 277 |
| | June | 4,278 | 703 | 76 | 759 | 379 | 3,920 | 275 |
| | July | 4,333 | 652 | -20 | 824 | 329 | 3,812 | 276 |
| | August | 4,440 | 644 | 201 | 782 | 302 | 4,200 | 269 |
| | September | 4,259 | 582 | 129 | 841 | 323 | 3,807 | 266 |
| | October* | 4,193 | 699 | 42 | 768 | 268 | 3,898 | 264 |
| | **10-Mo. Average** | **4,177** | **655** | **-47** | **744** | **316** | **3,725** | **--** |
| 1987 | **10-Mo. Average** | **4,090** | **610** | **-24** | **788** | **283** | **3,605** | **--** |
| 1986 | **10-Mo. Average** | **4,015** | **569** | **-25** | **865** | **303** | **3,391** | **--** |

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[1] Includes pentanes plus, other hydrocarbons and alcohol, unfinished oils, gasoline blending components and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil, and liquefied petroleum gases.

[2] A negative number indicates an increase in stocks and a positive number indicates a decrease.

[3] Stocks are totals as of end of period.

[4] In January 1975, 1981, 1983, and 1984, a new stock basis was established affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10.

[5] Ending stocks and stock withdrawal for 1986 are slightly different from those published in the 1986 *Petroleum Supply Annual* (PSA)-- Volume 1. PSA statistics inadvertently omitted stocks of other hydrocarbons and alcohol.

* See Explanatory Note 9.6.

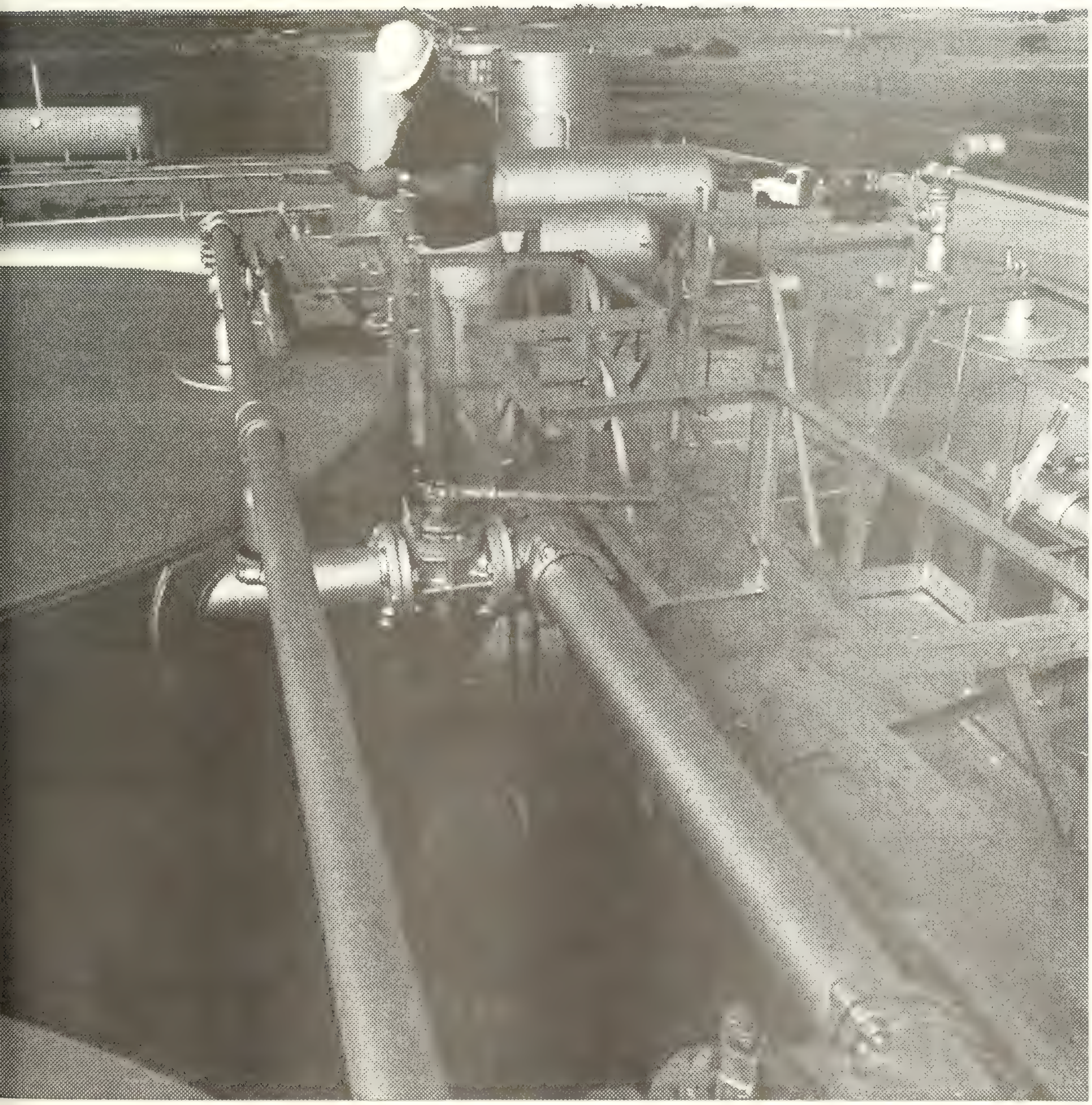
Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: See the last page of this section.

# Sources of Summary Statistics

1. 1973 through 1976: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys, Petroleum Statement, Annual* and *PAD Districts Supply/Demand, Annual.*
2. 1977 through 1980: U.S. Department of Energy, Energy Information Administration (EIA), *Energy Data Reports, Petroleum Statement, Annual* and *PAD Districts Supply/Demand, Annual*, and unleaded gasoline data from *Monthly Petroleum Statistics Report.*
3. 1981 through 1987: EIA, *Petroleum Supply Annual.*
4. January 1988 through October 1988: Detailed Statistics in appropriate issues of the *Petroleum Supply Monthly*. (See Explanatory Notes 9.1 through 9.6.)
5. November 1988: Estimates based on EIA weekly data (except domestic crude oil production). (See Explanatory Note 1.1.)
6. January 1988 through November 1988: Domestic crude oil production estimate based on historical statistics from State conservation agencies and the U.S. Geological Survey. (See Explanatory Note 3.)

# Detailed Statistics



*t some locations, oil skimmers and knockout tanks (in background) are used to remove waste water from the crude oil. The rude oil is then put into storage tanks and gauged.*

## Table 1. U.S. Petroleum Balance, October 1988

| | Current Month | | Year to Date | |
|---|---|---|---|---|
| | Thousand Barrels | Thousand Barrels per Day | Thousand Barrels | Thousand Barrels per Day |
| Crude Oil (Including Lease Condensate) | | | | |
| Field Production | | | | |
| (1) Alaska | E 62,316 | E 2,010 | E 615,485 | E 2,018 |
| (2) Lower 48 States | E 184,890 | E 5,964 | E 1,872,796 | E 6,140 |
| (3) Total U.S. | E 247,206 | E 7,974 | E 2,488,281 | E 8,158 |
| Net Imports | | | | |
| (4) Imports (Gross Excluding SPR) | 170,468 | 5,499 | 1,518,858 | 4,980 |
| (5) SPR Imports | 1,343 | 43 | 15,250 | 50 |
| (6) Exports | 5,296 | 171 | 49,440 | 162 |
| (7) Imports (Net Including SPR) | 166,515 | 5,371 | 1,484,668 | 4,868 |
| Other Sources | | | | |
| (8) SPR Withdrawal (+) or Addition (-) | -1,342 | -43 | -15,353 | -50 |
| (9) Other Stock Withdrawal (+) or Addition (-) | -11,159 | -360 | 9,682 | 32 |
| (10) Product Supplied and Losses | -1,310 | -42 | -11,781 | -39 |
| (11) Unaccounted for [1] | 8,926 | 288 | 98,584 | 323 |
| (12) Total Other Sources | -4,885 | -158 | 81,132 | 266 |
| (13) Crude Input to Refineries<br>(13) = (3) + (7) + (12) | 408,836 | 13,188 | 4,054,081 | 13,292 |
| Natural Gas Plant Liquids (NGPL) | | | | |
| (14) Field Production | 51,606 | 1,665 | 492,607 | 1,615 |
| (15) Net Imports [2] | 284 | 9 | 2,633 | 9 |
| (16) Stock Withdrawal (+) or Addition (-) [2] | 839 | 27 | -2,204 | -7 |
| (17) Total NGPL Supply | 52,729 | 1,701 | 493,036 | 1,617 |
| Other Liquids | | | | |
| Unfinished Oils and Gasoline Blending Components, Total | | | | |
| (18) Stock Withdrawal (+) or Addition (-) | 1,261 | 41 | -15,859 | -52 |
| (19) Imports | 11,748 | 379 | 124,858 | 409 |
| (20) Other Hydrocarbons and Alcohol New Supply (Field Production) | 1,972 | 64 | 18,183 | 60 |
| (21) Refinery Processing Gain [1] | 20,115 | 649 | 201,040 | 659 |
| (22) Crude Oil Product Supplied | 1,308 | 42 | 11,734 | 38 |
| (23) Total Other Liquids<br>(23) = (18) through (22) | 36,404 | 1,174 | 339,956 | 1,115 |
| (24) Total Production of Products [3]<br>(24) = (13) + (17) + (23) | 497,969 | 16,064 | 4,887,073 | 16,023 |
| Net Imports of Refined Products [3] | | | | |
| (25) Imports (Gross) | 53,762 | 1,734 | 498,328 | 1,634 |
| (26) Exports | 17,495 | 564 | 196,817 | 645 |
| (27) Imports (Net) | 36,267 | 1,170 | 301,512 | 989 |
| (28) Total New Supply of Products<br>(28) = (24) + (27) | 534,236 | 17,233 | 5,188,585 | 17,012 |
| (29) Refined Products Stock Withdrawal (+) or Addition (-) [3] | 7,679 | 248 | 1,443 | 5 |
| (30) Total Petroleum Products Supplied for Domestic Use<br>(30) = (28) + (29) | 541,915 | 17,481 | 5,190,028 | 17,016 |
| (31) Finished Motor Gasoline | 225,902 | 7,287 | 2,228,295 | 7,306 |
| (32) Distillate Fuel Oil | 99,310 | 3,204 | 931,048 | 3,053 |
| (33) Residual Fuel Oil | 39,146 | 1,263 | 388,331 | 1,273 |
| (34) Liquefied Petroleum Gases | 55,406 | 1,787 | 494,425 | 1,621 |
| (35) Other [4] | 120,843 | 3,898 | 1,136,195 | 3,725 |
| (36) Crude Oil | 1,308 | 42 | 11,734 | 38 |
| (37) Total Product Supplied<br>(37) = (31) through (36) | 541,915 | 17,481 | 5,190,028 | 17,016 |
| Ending Stocks, All Oils | | | | |
| (38) Crude Oil and Lease Condensate (Excluding SPR) | 339,607 | -- | 339,607 | -- |
| (39) Strategic Petroleum Reserve (SPR) | 556,001 | -- | 556,001 | -- |
| (40) Unfinished Oils | 108,951 | -- | 108,951 | -- |
| (41) Gasoline Blending Components [5] | 38,177 | -- | 38,177 | -- |
| (42) Pentanes Plus | 9,235 | -- | 9,235 | -- |
| (43) Finished Refined Products [3] | 578,171 | -- | 578,171 | -- |
| (44) Total Stocks | 1,630,142 | -- | 1,630,142 | -- |

[1] A balancing item.
[2] Includes products in the pentanes plus category only.
[3] For products included see Explanatory Note 9.7
[4] Includes pentanes plus, other liquids, and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil and liquefied petroleum gases.
[5] Includes other hydrocarbons and alcohol
E = Estimated.
Note: Total may not equal sum of components due to independent rounding.
Sources and estimation procedures: See Explanatory Notes 1, 2 and 9.7.

## Table 2. Supply and Disposition of Crude Oil and Petroleum Products, October 1988
(Thousand Barrels)

| Commodity | Supply | | | | | Disposition | | | | Ending Stocks |
|---|---|---|---|---|---|---|---|---|---|---|
| | Field Production | Refinery Production | Imports | Stock Withdrawal (+) or Addition (-) | Unaccounted For Crude Oil[1] | Crude Losses | Refinery Inputs | Exports | Products Supplied | |
| **Crude Oil (including lease condensate)** | E **247,206** | **0** | **171,811** | **-12,501** | **8,926** | **2** | **408,836** | **5,296** | **1,308** | **895,608** |
| **Natural Gas Liquids and LRGs** | **51,480** | **15,887** | **7,035** | **2,536** | **0** | **0** | **14,059** | **1,792** | **61,086** | **129,158** |
| Pentanes Plus | 9,426 | 0 | 335 | 839 | 0 | 0 | 4,869 | 51 | 5,680 | 9,235 |
| Liquefied Petroleum Gases | 42,054 | 15,887 | 6,700 | 1,697 | 0 | 0 | 9,190 | 1,741 | 55,406 | 119,923 |
| Ethane | 16,596 | 270 | 36 | 610 | 0 | 0 | 75 | 102 | 17,335 | 18,159 |
| Propane | 15,824 | 11,509 | 3,212 | 1,252 | 0 | 0 | 258 | 1,288 | 30,251 | 60,888 |
| Normal Butane | 5,244 | 3,789 | 2,244 | -505 | 0 | 0 | 4,621 | 300 | 5,851 | 29,775 |
| Isobutane | 4,390 | 319 | 1,208 | 340 | 0 | 0 | 4,236 | 51 | 1,970 | 11,101 |
| **Other Liquids** | **1,972** | **0** | **11,748** | **1,261** | **0** | **0** | **18,924** | **0** | **-3,943** | **147,128** |
| Other Hydrocarbons and Alcohol | 1,972 | 0 | 0 | -213 | 0 | 0 | 1,759 | 0 | 0 | 594 |
| Unfinished Oils | 0 | 0 | 10,252 | 217 | 0 | 0 | 13,461 | 0 | -2,992 | 108,951 |
| Motor Gasoline Blending Components | 0 | 0 | 1,496 | 1,339 | 0 | 0 | 3,785 | 0 | -950 | 37,310 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | -82 | 0 | 0 | -81 | 0 | -1 | 273 |
| **Finished Petroleum Products** | **126** | **446,047** | **47,062** | **5,982** | **0** | **0** | **0** | **15,753** | **483,464** | **458,248** |
| Finished Motor Gasoline | 10 | 213,122 | 11,238 | 1,942 | 0 | 0 | 0 | 410 | 225,902 | 180,003 |
| Finished Leaded Motor Gasoline | 9 | 36,713 | 60 | 3,488 | 0 | 0 | 0 | 135 | 40,135 | 38,573 |
| Finished Unleaded Motor Gasoline | 1 | 176,409 | 11,178 | -1,546 | 0 | 0 | 0 | 275 | 185,767 | 141,430 |
| Finished Aviation Gasoline | 0 | 823 | 4 | -43 | 0 | 0 | 0 | 0 | 784 | 1,947 |
| Naphtha-Type Jet Fuel | 0 | 6,442 | 83 | 176 | 0 | 0 | 0 | 77 | 6,624 | 6,316 |
| Kerosene-Type Jet Fuel | 0 | 35,906 | 4,208 | -715 | 0 | 0 | 0 | 54 | 39,345 | 41,032 |
| Kerosene | 0 | 2,468 | 857 | -538 | 0 | 0 | 0 | 65 | 2,722 | 8,006 |
| Distillate Fuel Oil | 39 | 87,678 | 10,055 | 3,027 | 0 | 0 | 0 | 1,489 | 99,310 | 127,949 |
| Residual Fuel Oil | 0 | 26,743 | 16,193 | 1,815 | 0 | 0 | 0 | 5,605 | 39,146 | 42,405 |
| Naphtha < 400 Deg. for Petro. Feed. Use | 0 | 3,288 | 2,324 | 48 | 0 | 0 | 0 | 149 | 5,511 | 2,228 |
| Other Oils > 400 Deg. for Petro. Feed. Use | 0 | 6,739 | 252 | 280 | 0 | 0 | 0 | 339 | 6,932 | 1,366 |
| Special Naphthas | 0 | 2,212 | 218 | 31 | 0 | 0 | 0 | 104 | 2,357 | 3,296 |
| Lubricants | 0 | 5,195 | 339 | -242 | 0 | 0 | 0 | 532 | 4,760 | 12,757 |
| Waxes | 0 | 521 | 54 | 10 | 0 | 0 | 0 | 39 | 546 | 819 |
| Petroleum Coke | 0 | 16,382 | 21 | -922 | 0 | 0 | 0 | 6,848 | 8,633 | 8,059 |
| Asphalt and Road Oil | 0 | 15,737 | 1,150 | 998 | 0 | 0 | 0 | 5 | 17,880 | 18,643 |
| Still Gas | 0 | 20,562 | 0 | 0 | 0 | 0 | 0 | 0 | 20,562 | 0 |
| Miscellaneous Products | 77 | 2,229 | 66 | 115 | 0 | 0 | 0 | 37 | 2,450 | 3,422 |
| **Total** | **300,784** | **461,934** | **237,656** | **-2,722** | **8,926** | **2** | **441,819** | **22,842** | **541,915** | **1,630,142** |

[1] Unaccounted for crude oil is a balancing item.

(s) = Less than 500 barrels.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 3. Year-to-Date Supply and Disposition of Crude Oil and Petroleum Products, January - October 1988
(Thousand Barrels)

| Commodity | Supply | | | | | Disposition | | | | Ending Stocks |
|---|---|---|---|---|---|---|---|---|---|---|
| | Field Production | Refinery Production | Imports | Stock Withdrawal (+) or Addition (-) | Unaccounted For Crude Oil[1] | Crude Losses | Refinery Inputs | Exports | Products Supplied | |
| **Crude Oil (including lease condensate)** | E **2,488,281** | **0** | **1,534,108** | **-5,671** | **98,584** | **47** | **4,054,081** | **49,440** | **11,734** | **895,608** |
| **Natural Gas Liquids and LRGs** | **491,438** | **152,565** | **65,253** | **-24,975** | **0** | **0** | **131,536** | **13,687** | **539,058** | **129,158** |
| Pentanes Plus | 92,608 | 0 | 3,239 | -2,204 | 0 | 0 | 48,404 | 606 | 44,633 | 9,235 |
| Liquefied Petroleum Gases | 398,830 | 152,565 | 62,014 | -22,771 | 0 | 0 | 83,132 | 13,081 | 494,425 | 119,923 |
| Ethane | 150,054 | 3,136 | 393 | 4,100 | 0 | 0 | 631 | 1,223 | 155,829 | 18,159 |
| Propane | 153,701 | 107,685 | 32,076 | -13,039 | 0 | 0 | 2,497 | 7,925 | 270,000 | 60,888 |
| Normal Butane | 50,930 | 37,504 | 18,749 | -13,227 | 0 | 0 | 37,481 | 3,326 | 53,150 | 29,775 |
| Isobutane | 44,145 | 4,240 | 10,795 | -605 | 0 | 0 | 42,523 | 606 | 15,446 | 11,101 |
| **Other Liquids** | **18,183** | **0** | **124,858** | **-15,859** | **0** | **0** | **178,443** | **0** | **-51,261** | **147,128** |
| Other Hydrocarbons and Alcohol | 18,183 | 0 | 0 | -162 | 0 | 0 | 18,021 | 0 | 0 | 594 |
| Unfinished Oils | 0 | 0 | 107,525 | -15,766 | 0 | 0 | 132,328 | 0 | -40,569 | 108,951 |
| Motor Gasoline Blending Components | 0 | 0 | 17,333 | 86 | 0 | 0 | 27,911 | 0 | -10,492 | 37,310 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | -17 | 0 | 0 | 183 | 0 | -200 | 273 |
| **Finished Petroleum Products** | **1,169** | **4,412,535** | **436,315** | **24,214** | **0** | **0** | **0** | **183,736** | **4,690,496** | **458,248** |
| Finished Motor Gasoline | 98 | 2,106,958 | 118,578 | 8,891 | 0 | 0 | 0 | 6,230 | 2,228,295 | 180,003 |
| Finished Leaded Motor Gasoline | 88 | 403,362 | 3,529 | 14,622 | 0 | 0 | 0 | 2,084 | 419,517 | 38,573 |
| Finished Unleaded Motor Gasoline | 10 | 1,703,596 | 115,049 | -5,731 | 0 | 0 | 0 | 4,146 | 1,808,778 | 141,430 |
| Finished Aviation Gasoline | 0 | 7,846 | 138 | 384 | 0 | 0 | 0 | 0 | 8,368 | 1,947 |
| Naphtha-Type Jet Fuel | 0 | 62,015 | 887 | 1,640 | 0 | 0 | 0 | 413 | 64,129 | 6,316 |
| Kerosene-Type Jet Fuel | 0 | 353,409 | 26,484 | 939 | 0 | 0 | 0 | 6,963 | 373,869 | 41,032 |
| Kerosene | 0 | 22,677 | 4,066 | 441 | 0 | 0 | 0 | 317 | 26,867 | 8,006 |
| Distillate Fuel Oil | 429 | 864,204 | 81,256 | 6,533 | 0 | 0 | 0 | 21,374 | 931,048 | 127,949 |
| Residual Fuel Oil | 0 | 278,845 | 164,898 | 4,932 | 0 | 0 | 0 | 60,344 | 388,331 | 42,405 |
| Naphtha < 400 Deg. for Petro. Feed. Use | 0 | 36,321 | 20,698 | 108 | 0 | 0 | 0 | 1,517 | 55,610 | 2,228 |
| Other Oils > 400 Deg. for Petro. Feed. Use | 0 | 68,311 | 1,549 | 235 | 0 | 0 | 0 | 5,003 | 65,092 | 1,366 |
| Special Naphthas | 0 | 18,258 | 3,598 | 357 | 0 | 0 | 0 | 1,859 | 20,354 | 3,296 |
| Lubricants | 0 | 52,516 | 3,088 | 560 | 0 | 0 | 0 | 7,489 | 48,675 | 12,757 |
| Waxes | 0 | 5,193 | 483 | -36 | 0 | 0 | 0 | 512 | 5,128 | 819 |
| Petroleum Coke | 0 | 164,785 | 349 | -1,299 | 0 | 0 | 0 | 70,918 | 92,917 | 8,059 |
| Asphalt and Road Oil | 0 | 142,515 | 9,718 | 156 | 0 | 0 | 0 | 252 | 152,137 | 18,643 |
| Still Gas | 0 | 206,965 | 0 | 0 | 0 | 0 | 0 | 0 | 206,965 | 0 |
| Miscellaneous Products | 642 | 21,717 | 525 | 373 | 0 | 0 | 0 | 545 | 22,712 | 3,422 |
| **Total** | **2,999,071** | **4,565,100** | **2,160,533** | **-22,291** | **98,584** | **47** | **4,364,060** | **246,863** | **5,190,028** | **1,630,142** |

[1] Unaccounted for crude oil is a balancing item.

(s) = Less than 500 barrels.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 4. Daily Average Supply and Disposition of Crude Oil and Petroleum Products, October 1988
(Thousand Barrels per Day)

| Commodity | Supply | | | | | Disposition | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Field Production | Refinery Production | Imports | Stock Withdrawal (+) or Addition (-) | Unaccounted For Crude Oil[1] | Crude Losses | Refinery Inputs | Exports | Products Supplied |
| **Crude Oil (including lease condensate)** | E 7,974 | 0 | 5,542 | -403 | 288 | (s) | 13,188 | 171 | 42 |
| **Natural Gas Liquids and LRGs** | **1,661** | **512** | **227** | **82** | **0** | **0** | **454** | **58** | **1,971** |
| Pentanes Plus | 304 | 0 | 11 | 27 | 0 | 0 | 157 | 2 | 183 |
| Liquefied Petroleum Gases | 1,357 | 512 | 216 | 55 | 0 | 0 | 296 | 56 | 1,787 |
| Ethane | 535 | 9 | 1 | 20 | 0 | 0 | 2 | 3 | 559 |
| Propane | 510 | 371 | 104 | 40 | 0 | 0 | 8 | 42 | 976 |
| Normal Butane | 169 | 122 | 72 | -16 | 0 | 0 | 149 | 10 | 189 |
| Isobutane | 142 | 10 | 39 | 11 | 0 | 0 | 137 | 2 | 64 |
| **Other Liquids** | **64** | **0** | **379** | **41** | **0** | **0** | **610** | **0** | **-127** |
| Other Hydrocarbons and Alcohol | 64 | 0 | 0 | -7 | 0 | 0 | 57 | 0 | 0 |
| Unfinished Oils | 0 | 0 | 331 | 7 | 0 | 0 | 434 | 0 | -97 |
| Motor Gasoline Blending Components | 0 | 0 | 48 | 43 | 0 | 0 | 122 | 0 | -31 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | -3 | 0 | 0 | -3 | 0 | (s) |
| **Finished Petroleum Products** | **4** | **14,389** | **1,518** | **193** | **0** | **0** | **0** | **508** | **15,596** |
| Finished Motor Gasoline | (s) | 6,875 | 363 | 63 | 0 | 0 | 0 | 13 | 7,287 |
| Finished Leaded Motor Gasoline | (s) | 1,184 | 2 | 113 | 0 | 0 | 0 | 4 | 1,295 |
| Finished Unleaded Motor Gasoline | (s) | 5,691 | 361 | -50 | 0 | 0 | 0 | 9 | 5,992 |
| Finished Aviation Gasoline | 0 | 27 | (s) | -1 | 0 | 0 | 0 | 0 | 25 |
| Naphtha-Type Jet Fuel | 0 | 208 | 3 | 6 | 0 | 0 | 0 | 2 | 214 |
| Kerosene-Type Jet Fuel | 0 | 1,158 | 136 | -23 | 0 | 0 | 0 | 2 | 1,269 |
| Kerosene | 0 | 80 | 28 | -17 | 0 | 0 | 0 | 2 | 88 |
| Distillate Fuel Oil | 1 | 2,828 | 324 | 98 | 0 | 0 | 0 | 48 | 3,204 |
| Residual Fuel Oil | 0 | 863 | 522 | 59 | 0 | 0 | 0 | 181 | 1,263 |
| Naphtha < 400 Deg. for Petro. Feed. Use | 0 | 106 | 75 | 2 | 0 | 0 | 0 | 5 | 178 |
| Other Oils > 400 Deg. for Petro. Feed. Use | 0 | 217 | 8 | 9 | 0 | 0 | 0 | 11 | 224 |
| Special Naphthas | 0 | 71 | 7 | 1 | 0 | 0 | 0 | 3 | 76 |
| Lubricants | 0 | 168 | 11 | -8 | 0 | 0 | 0 | 17 | 154 |
| Waxes | 0 | 17 | 2 | (s) | 0 | 0 | 0 | 1 | 18 |
| Petroleum Coke | 0 | 528 | 1 | -30 | 0 | 0 | 0 | 221 | 278 |
| Asphalt and Road Oil | 0 | 508 | 37 | 32 | 0 | 0 | 0 | (s) | 577 |
| Still Gas | 0 | 663 | 0 | 0 | 0 | 0 | 0 | 0 | 663 |
| Miscellaneous Products | 2 | 72 | 2 | 4 | 0 | 0 | 0 | 1 | 79 |
| **Total** | **9,703** | **14,901** | **7,666** | **-88** | **288** | (s) | **14,252** | **737** | **17,481** |

[1] Unaccounted for crude oil is a balancing item.
(s) = Less than 500 barrels per day.
E = Estimated.
Note: Total may not equal sum of components due to independent rounding.
Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 5. Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products, January - October 1988
(Thousand Barrels per Day)

| Commodity | Supply | | | | | Disposition | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Field Production | Refinery Production | Imports | Stock Withdrawal (+) or Addition (-) | Unaccounted For Crude Oil[1] | Crude Losses | Refinery Inputs | Exports | Products Supplied |
| **Crude Oil (including lease condensate)** | E **8,158** | **0** | **5,030** | **-19** | **323** | (s) | **13,292** | **162** | **38** |
| **Natural Gas Liquids and LRGs** | **1,611** | **500** | **214** | **-82** | **0** | **0** | **431** | **45** | **1,767** |
| Pentanes Plus | 304 | 0 | 11 | -7 | 0 | 0 | 159 | 2 | 146 |
| Liquefied Petroleum Gases | 1,308 | 500 | 203 | -75 | 0 | 0 | 273 | 43 | 1,621 |
| Ethane | 492 | 10 | 1 | 13 | 0 | 0 | 2 | 4 | 511 |
| Propane | 504 | 353 | 105 | -43 | 0 | 0 | 8 | 26 | 885 |
| Normal Butane | 167 | 123 | 61 | -43 | 0 | 0 | 123 | 11 | 174 |
| Isobutane | 145 | 14 | 35 | -2 | 0 | 0 | 139 | 2 | 51 |
| **Other Liquids** | **60** | **0** | **409** | **-52** | **0** | **0** | **585** | **0** | **-168** |
| Other Hydrocarbons and Alcohol | 60 | 0 | 0 | -1 | 0 | 0 | 59 | 0 | 0 |
| Unfinished Oils | 0 | 0 | 353 | -52 | 0 | 0 | 434 | 0 | -133 |
| Motor Gasoline Blending Components | 0 | 0 | 57 | (s) | 0 | 0 | 92 | 0 | -34 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | (s) | 0 | 0 | 1 | 0 | -1 |
| **Finished Petroleum Products** | **4** | **14,467** | **1,431** | **79** | **0** | **0** | **0** | **602** | **15,379** |
| Finished Motor Gasoline | (s) | 6,908 | 389 | 29 | 0 | 0 | 0 | 20 | 7,306 |
| Finished Leaded Motor Gasoline | (s) | 1,322 | 12 | 48 | 0 | 0 | 0 | 7 | 1,375 |
| Finished Unleaded Motor Gasoline | (s) | 5,586 | 377 | -19 | 0 | 0 | 0 | 14 | 5,930 |
| Finished Aviation Gasoline | 0 | 26 | (s) | 1 | 0 | 0 | 0 | 0 | 27 |
| Naphtha-Type Jet Fuel | 0 | 203 | 3 | 5 | 0 | 0 | 0 | 1 | 210 |
| Kerosene-Type Jet Fuel | 0 | 1,159 | 87 | 3 | 0 | 0 | 0 | 23 | 1,226 |
| Kerosene | 0 | 74 | 13 | 1 | 0 | 0 | 0 | 1 | 88 |
| Distillate Fuel Oil | 1 | 2,833 | 266 | 21 | 0 | 0 | 0 | 70 | 3,053 |
| Residual Fuel Oil | 0 | 914 | 541 | 16 | 0 | 0 | 0 | 198 | 1,273 |
| Naphtha < 400 Deg for Petro Feed Use | 0 | 119 | 68 | (s) | 0 | 0 | 0 | 5 | 182 |
| Other Oils > 400 Deg for Petro Feed Use | 0 | 224 | 5 | 1 | 0 | 0 | 0 | 16 | 213 |
| Special Naphthas | 0 | 60 | 12 | 1 | 0 | 0 | 0 | 6 | 67 |
| Lubricants | 0 | 172 | 10 | 2 | 0 | 0 | 0 | 25 | 160 |
| Waxes | 0 | 17 | 2 | (s) | 0 | 0 | 0 | 2 | 17 |
| Petroleum Coke | 0 | 540 | 1 | -4 | 0 | 0 | 0 | 233 | 305 |
| Asphalt and Road Oil | 0 | 467 | 32 | 1 | 0 | 0 | 0 | 1 | 499 |
| Still Gas | 0 | 679 | 0 | 0 | 0 | 0 | 0 | 0 | 679 |
| Miscellaneous Products | 2 | 71 | 2 | 1 | 0 | 0 | 0 | 2 | 74 |
| **Total** | 9,833 | 14,968 | 7,084 | -73 | 323 | (s) | 14,308 | 809 | 17,016 |

[1] Unaccounted for crude oil is a balancing item

(s) - Less than 500 barrels per day

E - Estimated

Note Total may not equal sum of components due to independent rounding

Sources and estimation procedures See Explanatory Notes 1 and 2

### Table 6. PAD District I--Supply and Disposition of Crude Oil and Petroleum Products, October 1988

(Thousand Barrels)

| Commodity | Supply | | | | | | Disposition | | | | Ending Stocks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Field Production | Refinery Production | Imports by PADD of Entry | Stock Withdrawal (+) or Addition (-) | Unaccounted For Crude Oil[1] | Net Receipts | Crude Losses | Refinery Inputs | Exports | Products Supplied | |
| **Crude Oil (including lease condensate)** | E 1,063 | **0** | **40,611** | **-1,748** | **-2,308** | **1,849** | **1** | **39,466** | **0** | **0** | **16,801** |
| **Natural Gas Liquids and LRGs** | **842** | **1,851** | **1,046** | **318** | **0** | **3,132** | **0** | **172** | **38** | **6,979** | **5,587** |
| Liquefied Petroleum Gases | 740 | 1,851 | 805 | 319 | 0 | 3,132 | 0 | 165 | 38 | 6,644 | 5,534 |
| Pentanes Plus | 102 | 0 | 241 | -1 | 0 | 0 | 0 | 7 | 0 | 335 | 53 |
| **Other Liquids** | **10** | **0** | **5,279** | **1,160** | **0** | **388** | **0** | **7,464** | **0** | **-627** | **17,061** |
| Other Hydrocarbons and Alcohol | 10 | 0 | 0 | -10 | 0 | 0 | 0 | 0 | 0 | 0 | 16 |
| Unfinished Oils | 0 | 0 | 4,048 | 1,113 | 0 | 124 | 0 | 6,545 | 0 | -1,260 | 12,483 |
| Motor Gasoline Blending Components | 0 | 0 | 1,231 | 57 | 0 | 264 | 0 | 919 | 0 | 633 | 4,562 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Finished Petroleum Products** | **0** | **47,815** | **39,744** | **2,564** | **0** | **69,910** | **0** | **0** | **578** | **159,455** | **153,522** |
| Finished Motor Gasoline | 0 | 21,675 | 10,099 | 2,056 | 0 | 39,999 | 0 | 0 | 27 | 73,802 | 53,973 |
| Finished Leaded Motor Gasoline | 0 | 2,001 | 57 | 2,128 | 0 | 4,395 | 0 | 0 | 24 | 8,557 | 8,433 |
| Finished Unleaded Motor Gasoline | 0 | 19,674 | 10,042 | -72 | 0 | 35,604 | 0 | 0 | 2 | 65,246 | 45,540 |
| Finished Aviation Gasoline | 0 | 30 | 0 | -104 | 0 | 288 | 0 | 0 | 0 | 214 | 391 |
| Naphtha-Type Jet Fuel | 0 | 761 | 0 | 61 | 0 | 785 | 0 | 0 | (s) | 1,607 | 1,077 |
| Kerosene-Type Jet Fuel | 0 | 1,871 | 2,868 | -832 | 0 | 11,039 | 0 | 0 | 4 | 14,942 | 10,626 |
| Kerosene | 0 | 341 | 527 | -238 | 0 | 498 | 0 | 0 | 7 | 1,121 | 3,171 |
| Distillate Fuel Oil | 0 | 10,252 | 9,661 | 272 | 0 | 14,843 | 0 | 0 | 44 | 34,984 | 56,537 |
| Residual Fuel Oil | 0 | 4,232 | 14,912 | 1,673 | 0 | 449 | 0 | 0 | 130 | 21,136 | 17,608 |
| Petrochemical Feedstocks[2] | 0 | 192 | 196 | 66 | 0 | -1 | 0 | 0 | 60 | 393 | 354 |
| Special Naphthas | 0 | 186 | 12 | -74 | 0 | 335 | 0 | 0 | 9 | 450 | 986 |
| Lubricants | 0 | 748 | 325 | -106 | 0 | 1,018 | 0 | 0 | 182 | 1,803 | 2,731 |
| Waxes | 0 | 95 | 35 | -17 | 0 | 6 | 0 | 0 | 4 | 115 | 79 |
| Petroleum Coke | 0 | 1,327 | 0 | -19 | 0 | 0 | 0 | 0 | 87 | 1,221 | 672 |
| Asphalt and Road Oil | 0 | 3,776 | 1,054 | -69 | 0 | 604 | 0 | 0 | (s) | 5,365 | 4,534 |
| Still Gas | 0 | 1,912 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,912 | 0 |
| Miscellaneous Products | 0 | 417 | 55 | -105 | 0 | 47 | 0 | 0 | 23 | 391 | 783 |
| **Total** | **1,915** | **49,666** | **86,680** | **2,294** | **-2,308** | **75,279** | **1** | **47,102** | **616** | **165,807** | **192,971** |

[1] Unaccounted for crude oil is a balancing item.

[2] Includes naphtha less than 400 degrees F endpoint and other oils equal to or greater than 400 degrees F endpoint.

(s) = Less than 500 barrels.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 7. PAD District II--Supply and Disposition of Crude Oil and Petroleum Products, October 1988

(Thousand Barrels)

| Commodity | Supply | | | | | | Disposition | | | | Ending Stocks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Field Production | Refinery Production | Imports by PADD of Entry | Stock Withdrawal (+) or Addition (-) | Unaccounted For Crude Oil[1] | Net Receipts | Crude Losses | Refinery Inputs | Exports | Products Supplied | |
| **Crude Oil (including lease condensate)** | E **24,493** | **0** | **14,805** | **-4,604** | **4,301** | **49,392** | **0** | **88,294** | **93** | **0** | **68,998** |
| **Natural Gas Liquids and LRGs** | **9,641** | **2,313** | **2,664** | **1,976** | **0** | **1,273** | **0** | **4,253** | **419** | **13,194** | **38,139** |
| Liquefied Petroleum Gases | 8,174 | 2,313 | 2,636 | 1,660 | 0 | 524 | 0 | 2,874 | 368 | 12,065 | 35,087 |
| Pentanes Plus | 1,467 | 0 | 28 | 316 | 0 | 749 | 0 | 1,379 | 51 | 1,130 | 3,052 |
| **Other Liquids** | **401** | **0** | **0** | **-616** | **0** | **325** | **0** | **2,675** | **0** | **-2,565** | **24,281** |
| Other Hydrocarbons and Alcohol | 401 | 0 | 0 | 35 | 0 | 0 | 0 | 436 | 0 | 0 | 157 |
| Unfinished Oils | 0 | 0 | 0 | -1,663 | 0 | 371 | 0 | -373 | 0 | -919 | 16,643 |
| Motor Gasoline Blending Components | 0 | 0 | 0 | 1,045 | 0 | -46 | 0 | 2,645 | 0 | -1,646 | 7,374 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | -33 | 0 | 0 | 0 | -33 | 0 | 0 | 107 |
| **Finished Petroleum Products** | **3** | **96,521** | **1,377** | **4,364** | **0** | **24,874** | **0** | **0** | **242** | **126,898** | **107,201** |
| Finished Motor Gasoline | 0 | 51,606 | 211 | 1,778 | 0 | 14,559 | 0 | 0 | 10 | 68,144 | 51,049 |
| Finished Leaded Motor Gasoline | 0 | 8,586 | 0 | 1,050 | 0 | 2,268 | 0 | 0 | 2 | 11,902 | 12,367 |
| Finished Unleaded Motor Gasoline | 0 | 43,020 | 211 | 728 | 0 | 12,291 | 0 | 0 | 8 | 56,242 | 38,682 |
| Finished Aviation Gasoline | 0 | 85 | 0 | 41 | 0 | 96 | 0 | 0 | 0 | 222 | 463 |
| Naphtha-Type Jet Fuel | 0 | 588 | 83 | 34 | 0 | -123 | 0 | 0 | 0 | 582 | 885 |
| Kerosene-Type Jet Fuel | 0 | 4,594 | 462 | 329 | 0 | 3,087 | 0 | 0 | 1 | 8,472 | 8,151 |
| Kerosene | 0 | 452 | 0 | -14 | 0 | -198 | 0 | 0 | 57 | 183 | 2,189 |
| Distillate Fuel Oil | 0 | 21,058 | 230 | 1,750 | 0 | 7,143 | 0 | 0 | 59 | 30,122 | 28,637 |
| Residual Fuel Oil | 0 | 2,074 | 247 | -173 | 0 | -424 | 0 | 0 | 0 | 1,724 | 3,574 |
| Petrochemical Feedstocks[2] | 0 | 1,317 | 13 | -28 | 0 | 78 | 0 | 0 | 44 | 1,336 | 434 |
| Special Naphthas | 0 | 605 | 35 | 44 | 0 | 116 | 0 | 0 | 5 | 795 | 643 |
| Lubricants | 0 | 876 | 14 | -52 | 0 | 176 | 0 | 0 | 32 | 982 | 2,003 |
| Waxes | 0 | 57 | 15 | 10 | 0 | 0 | 0 | 0 | 1 | 81 | 123 |
| Petroleum Coke | 0 | 3,046 | 0 | 135 | 0 | 0 | 0 | 0 | 30 | 3,151 | 1,364 |
| Asphalt and Road Oil | 0 | 5,616 | 63 | 592 | 0 | 364 | 0 | 0 | 1 | 6,634 | 7,314 |
| Still Gas | 0 | 4,074 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,074 | 0 |
| Miscellaneous Products | 3 | 473 | 4 | -82 | 0 | 0 | 0 | 0 | 2 | 396 | 372 |
| **Total** | 34,538 | 98,834 | 18,846 | 1,120 | 4,301 | 75,864 | 0 | 95,222 | 754 | 137,527 | 238,619 |

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[1] Unaccounted for crude oil is a balancing item.

[2] Includes naphtha less than 400 degrees F endpoint and other oils equal to or greater than 400 degrees F endpoint.

(s) = Less than 500 barrels.

E = Estimated

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 8. PAD District III--Supply and Disposition of Crude Oil and Petroleum Products, October 1988
(Thousand Barrels)

| Commodity | Supply | | | | | | Disposition | | | | Ending Stocks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Field Production | Refinery Production | Imports by PADD of Entry | Stock Withdrawal (+) or Addition (-) | Unaccounted For Crude Oil[1] | Net Receipts | Crude Losses | Refinery Inputs | Exports | Products Supplied | |
| **Crude Oil (including lease condensate)** | E 109,393 | 0 | 109,317 | -2,659 | 2,290 | -29,298 | 1 | 189,042 | 0 | 0 | 714,272 |
| **Natural Gas Liquids and LRGs** | 34,059 | 9,411 | 2,551 | 625 | 0 | -2,150 | 0 | 8,245 | 1,014 | 35,237 | 79,611 |
| Liquefied Petroleum Gases | 28,386 | 9,411 | 2,547 | 68 | 0 | -1,568 | 0 | 5,013 | 1,014 | 32,817 | 73,756 |
| Pentanes Plus | 5,673 | 0 | 4 | 557 | 0 | -582 | 0 | 3,232 | 0 | 2,420 | 5,855 |
| **Other Liquids** | 1,002 | 0 | 6,469 | -1,026 | 0 | -713 | 0 | 6,485 | 0 | -753 | 66,683 |
| Other Hydrocarbons and Alcohol | 1,002 | 0 | 0 | -56 | 0 | 0 | 0 | 946 | 0 | 0 | 176 |
| Unfinished Oils | 0 | 0 | 6,204 | -1,018 | 0 | -495 | 0 | 5,675 | 0 | -984 | 50,345 |
| Motor Gasoline Blending Components | 0 | 0 | 265 | 102 | 0 | -218 | 0 | -83 | 0 | 232 | 16,034 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | -54 | 0 | 0 | 0 | -53 | 0 | -1 | 128 |
| **Finished Petroleum Products** | 120 | 203,514 | 3,435 | -2,671 | 0 | -97,474 | 0 | 0 | 6,104 | 100,820 | 127,291 |
| Finished Motor Gasoline | 10 | 96,682 | 0 | -2,255 | 0 | -56,006 | 0 | 0 | 347 | 38,084 | 47,200 |
| Finished Leaded Motor Gasoline | 9 | 14,668 | 0 | 28 | 0 | -6,964 | 0 | 0 | 104 | 7,637 | 9,255 |
| Finished Unleaded Motor Gasoline | 1 | 82,014 | 0 | -2,283 | 0 | -49,042 | 0 | 0 | 243 | 30,447 | 37,945 |
| Finished Aviation Gasoline | 0 | 555 | 0 | -9 | 0 | -401 | 0 | 0 | 0 | 145 | 610 |
| Naphtha-Type Jet Fuel | 0 | 2,842 | 0 | 70 | 0 | -865 | 0 | 0 | 0 | 2,047 | 2,171 |
| Kerosene-Type Jet Fuel | 0 | 19,258 | 234 | -363 | 0 | -14,782 | 0 | 0 | 27 | 4,319 | 14,445 |
| Kerosene | 0 | 1,455 | 330 | -218 | 0 | -300 | 0 | 0 | 0 | 1,267 | 2,332 |
| Distillate Fuel Oil | 39 | 39,682 | 0 | 29 | 0 | -22,348 | 0 | 0 | 546 | 16,856 | 28,704 |
| Residual Fuel Oil | 0 | 8,675 | 298 | 426 | 0 | -25 | 0 | 0 | 951 | 8,423 | 11,542 |
| Petrochemical Feedstocks[2] | 0 | 7,996 | 2,367 | 214 | 0 | -77 | 0 | 0 | 299 | 10,201 | 2,477 |
| Special Naphthas | 0 | 1,327 | 164 | 49 | 0 | -451 | 0 | 0 | 84 | 1,005 | 1,530 |
| Lubricants | 0 | 3,109 | 0 | -196 | 0 | -1,198 | 0 | 0 | 217 | 1,498 | 6,405 |
| Waxes | 0 | 258 | 0 | 17 | 0 | -6 | 0 | 0 | 26 | 243 | 438 |
| Petroleum Coke | 0 | 7,399 | 2 | -828 | 0 | 0 | 0 | 0 | 3,598 | 2,975 | 4,000 |
| Asphalt and Road Oil | 0 | 3,532 | 33 | 101 | 0 | -968 | 0 | 0 | 2 | 2,696 | 3,616 |
| Still Gas | 0 | 9,540 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9,540 | 0 |
| Miscellaneous Products | 71 | 1,204 | 7 | 292 | 0 | -47 | 0 | 0 | 7 | 1,520 | 1,821 |
| **Total** | 144,574 | 212,925 | 121,771 | -5,731 | 2,290 | -129,635 | 1 | 203,772 | 7,118 | 135,303 | 987,857 |

[1] Unaccounted for crude oil is a balancing item.

[2] Includes naphtha less than 400 degrees F endpoint and other oils equal to or greater than 400 degrees F endpoint.

(s) = Less than 500 barrels.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 9. PAD District IV--Supply and Disposition of Crude Oil and Petroleum Products, October 1988
(Thousand Barrels)

| Commodity | Supply | | | | | | Disposition | | | | Ending Stocks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Field Production | Refinery Production | Imports by PADD of Entry | Stock Withdrawal (+) or Addition (-) | Unaccounted For Crude Oil[1] | Net Receipts | Crude Losses | Refinery Inputs | Exports | Products Supplied | |
| **Crude Oil (including lease condensate)** | E **16,306** | **0** | **1,480** | **-118** | **2,006** | **-6,710** | **0** | **12,964** | **0** | **0** | **11,859** |
| **Natural Gas Liquids and LRGs** | **4,235** | **246** | **368** | **-20** | **0** | **-2,255** | **0** | **505** | **45** | **2,024** | **1,317** |
| Liquefied Petroleum Gases | 3,444 | 246 | 306 | -7 | 0 | -2,088 | 0 | 410 | 45 | 1,446 | 1,168 |
| Pentanes Plus | 791 | 0 | 62 | -13 | 0 | -167 | 0 | 95 | 0 | 578 | 149 |
| **Other Liquids** | **50** | **0** | **0** | **246** | **0** | **0** | **0** | **279** | **0** | **17** | **3,506** |
| Other Hydrocarbons and Alcohol | 50 | 0 | 0 | 7 | 0 | 0 | 0 | 57 | 0 | 0 | 41 |
| Unfinished Oils | 0 | 0 | 0 | 77 | 0 | 0 | 0 | -125 | 0 | 202 | 1,853 |
| Motor Gasoline Blending Components | 0 | 0 | 0 | 162 | 0 | 0 | 0 | 347 | 0 | -185 | 1,612 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Finished Petroleum Products** | **3** | **13,770** | **155** | **42** | **0** | **-35** | **0** | **0** | **6** | **13,929** | **11,136** |
| Finished Motor Gasoline | 0 | 7,074 | 37 | -325 | 0 | -190 | 0 | 0 | 0 | 6,596 | 4,695 |
| Finished Leaded Motor Gasoline | 0 | 2,253 | 0 | 198 | 0 | -211 | 0 | 0 | 0 | 2,240 | 1,740 |
| Finished Unleaded Motor Gasoline | 0 | 4,821 | 37 | -523 | 0 | 21 | 0 | 0 | 0 | 4,356 | 2,955 |
| Finished Aviation Gasoline | 0 | 14 | 0 | -1 | 0 | 17 | 0 | 0 | 0 | 30 | 48 |
| Naphtha-Type Jet Fuel | 0 | 489 | 0 | -9 | 0 | -93 | 0 | 0 | (s) | 387 | 396 |
| Kerosene-Type Jet Fuel | 0 | 691 | 0 | 99 | 0 | 404 | 0 | 0 | 0 | 1 194 | 721 |
| Kerosene | 0 | 55 | 0 | -51 | 0 | 0 | 0 | 0 | 0 | 4 | 82 |
| Distillate Fuel Oil | 0 | 3,453 | 117 | 199 | 0 | -173 | 0 | 0 | 0 | 3,596 | 2,543 |
| Residual Fuel Oil | 0 | 342 | 0 | -48 | 0 | 0 | 0 | 0 | 0 | 294 | 595 |
| Petrochemical Feedstocks[2] | 0 | 39 | 0 | -9 | 0 | 0 | 0 | 0 | (s) | 30 | 26 |
| Special Naphthas | 0 | -6 | 0 | 4 | 0 | 0 | 0 | 0 | (s) | -2 | 8 |
| Lubricants | 0 | 5 | 0 | -3 | 0 | 0 | 0 | 0 | 4 | -2 | 100 |
| Waxes | 0 | 62 | 1 | -18 | 0 | 0 | 0 | 0 | 0 | 45 | 80 |
| Petroleum Coke | 0 | 315 | 0 | -5 | 0 | 0 | 0 | 0 | 0 | 310 | 14 |
| Asphalt and Road Oil | 0 | 609 | 0 | 208 | 0 | 0 | 0 | 0 | 1 | 816 | 1,765 |
| Still Gas | 0 | 571 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 571 | 0 |
| Miscellaneous Products | 3 | 57 | 0 | 1 | 0 | 0 | 0 | 0 | (s) | 61 | 63 |
| **Total** | 20,594 | 14,016 | 2,003 | 150 | 2,006 | -9,000 | 0 | 13,748 | 51 | 15,970 | 27,818 |

[1] Unaccounted for crude oil is a balancing item.

[2] Includes naphtha less than 400 degrees F endpoint and other oils equal to or greater than 400 degrees F endpoint

(s) — Less than 500 barrels

E — Estimated

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2

## Table 10. PAD District V--Supply and Disposition of Crude Oil and Petroleum Products, October 1988

(Thousand Barrels)

| Commodity | Supply | | | | | | Disposition | | | | Ending Stocks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Field Production | Refinery Production | Imports by PADD of Entry | Stock Withdrawal (+) or Addition (-) | Unaccounted For Crude Oil[1] | Net Receipts | Crude Losses | Refinery Inputs | Exports | Products Supplied | |
| **Crude Oil (including lease condensate)** | E 95,951 | 0 | 5,598 | -3,372 | 2,637 | -15,233 | 0 | 79,070 | 5,203 | 1,308 | 83,678 |
| **Natural Gas Liquids and LRGs** | **2,703** | **2,066** | **406** | **-363** | **0** | **0** | **0** | **884** | **276** | **3,653** | **4,504** |
| Liquefied Petroleum Gases | 1,310 | 2,066 | 406 | -343 | 0 | 0 | 0 | 728 | 276 | 2,436 | 4,378 |
| Pentanes Plus | 1,393 | 0 | 0 | -20 | 0 | 0 | 0 | 156 | 0 | 1,217 | 126 |
| **Other Liquids** | **509** | **0** | **0** | **1,497** | **0** | **0** | **0** | **2,021** | **0** | **-15** | **35,597** |
| Other Hydrocarbons and Alcohol | 509 | 0 | 0 | -189 | 0 | 0 | 0 | 320 | 0 | 0 | 204 |
| Unfinished Oils | 0 | 0 | 0 | 1,708 | 0 | 0 | 0 | 1,739 | 0 | -31 | 27,627 |
| Motor Gasoline Blending Components | 0 | 0 | 0 | -27 | 0 | 0 | 0 | -43 | 0 | 16 | 7,728 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 5 | 0 | 0 | 38 |
| **Finished Petroleum Products** | **0** | **84,427** | **2,351** | **1,683** | **0** | **2,725** | **0** | **0** | **8,824** | **82,362** | **59,098** |
| Finished Motor Gasoline | 0 | 36,085 | 891 | 688 | 0 | 1,638 | 0 | 0 | 27 | 39,275 | 23,086 |
| Finished Leaded Motor Gasoline | 0 | 9,205 | 3 | 84 | 0 | 512 | 0 | 0 | 6 | 9,798 | 6,778 |
| Finished Unleaded Motor Gasoline | 0 | 26,880 | 888 | 604 | 0 | 1,126 | 0 | 0 | 21 | 29,477 | 16,308 |
| Finished Aviation Gasoline | 0 | 139 | 4 | 30 | 0 | 0 | 0 | 0 | 0 | 173 | 435 |
| Naphtha-Type Jet Fuel | 0 | 1,762 | 0 | 20 | 0 | 296 | 0 | 0 | 77 | 2,001 | 1,787 |
| Kerosene-Type Jet Fuel | 0 | 9,492 | 644 | 52 | 0 | 252 | 0 | 0 | 22 | 10,418 | 7,089 |
| Kerosene | 0 | 165 | 0 | -17 | 0 | 0 | 0 | 0 | 1 | 147 | 232 |
| Distillate Fuel Oil | 0 | 13,233 | 47 | 777 | 0 | 535 | 0 | 0 | 840 | 13,752 | 11,528 |
| Residual Fuel Oil | 0 | 11,420 | 736 | -63 | 0 | 0 | 0 | 0 | 4,524 | 7,569 | 9,086 |
| Petrochemical Feedstocks[2] | 0 | 483 | 0 | 85 | 0 | 0 | 0 | 0 | 85 | 483 | 303 |
| Special Naphthas | 0 | 100 | 7 | 8 | 0 | 0 | 0 | 0 | 6 | 109 | 129 |
| Lubricants | 0 | 457 | 0 | 115 | 0 | 4 | 0 | 0 | 96 | 480 | 1,518 |
| Waxes | 0 | 49 | 3 | 18 | 0 | 0 | 0 | 0 | 7 | 63 | 99 |
| Petroleum Coke | 0 | 4,295 | 19 | -205 | 0 | 0 | 0 | 0 | 3,133 | 976 | 2,009 |
| Asphalt and Road Oil | 0 | 2,204 | 0 | 166 | 0 | 0 | 0 | 0 | 1 | 2,369 | 1,414 |
| Still Gas | 0 | 4,465 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,465 | 0 |
| Miscellaneous Products | 0 | 78 | 0 | 9 | 0 | 0 | 0 | 0 | 5 | 82 | 383 |
| **Total** | **99,163** | **86,493** | **8,355** | **-555** | **2,637** | **-12,508** | **0** | **81,975** | **14,303** | **87,308** | **182,877** |

[1] Unaccounted for crude oil is a balancing item.

[2] Includes naphtha less than 400 degrees F endpoint and other oils equal to or greater than 400 degrees F endpoint.

(s) = Less than 500 barrels.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 11. Production of Crude Oil by PAD District and State
(Thousand Barrels)

| PAD District and State | August 1988 | | January - August | |
|---|---|---|---|---|
| | Total | Daily Average | Total | Daily Average |
| **PAD District I, Total** | E **1,200** | E **39** | E **9,470** | E **39** |
| Florida | 668 | 22 | 5,370 | 22 |
| New York | E 48 | E 2 | E 392 | E 2 |
| Pennsylvania | E 253 | E 8 | E 1,954 | E 8 |
| Virginia | E 1 | E 0 | E 13 | E 0 |
| West Virginia | 228 | 7 | 1,792 | 7 |
| Adjustment [1] | 2 | (s) | -51 | (s) |
| **PAD District II, Total** | E **25,522** | E **823** | E **205,421** | E **842** |
| Illinois | 1,970 | 64 | 15,965 | 65 |
| Indiana | 310 | 10 | 2,652 | 11 |
| Kansas | 5,021 | 162 | 39,346 | 161 |
| Kentucky | 476 | 15 | 3,653 | 15 |
| Michigan | E 1,906 | E 61 | E 15,939 | E 65 |
| Missouri | 10 | (s) | E 85 | E 0 |
| Nebraska | 518 | 17 | 3,901 | 16 |
| North Dakota | 3,324 | 107 | 26,560 | 109 |
| Ohio | E 893 | E 29 | E 7,207 | E 30 |
| Oklahoma | 10,782 | 348 | 87,118 | 357 |
| South Dakota | 138 | 4 | 1,115 | 5 |
| Tennessee | 53 | 2 | E 403 | E 2 |
| Adjustment [1] | 121 | 4 | 1,476 | 6 |
| **PAD District III, Total** | E **110,385** | E **3,561** | E **894,953** | E **3,668** |
| Alabama | 1,781 | 57 | 13,901 | 57 |
| Arkansas | E 1,144 | E 37 | E 9,189 | E 38 |
| Louisiana [2] | 14,248 | 460 | 111,785 | 458 |
| Mississippi | 2,501 | 81 | 18,391 | 75 |
| New Mexico | 5,986 | 193 | 47,254 | 194 |
| Texas [2] | 61,377 | 1,980 | 494,030 | 2,025 |
| Federal Offshore PAD District III | 23,363 | 754 | E 197,915 | E 811 |
| Adjustment [1] | -15 | (s) | 2,487 | 10 |
| **PAD District IV, Total** | E **17,019** | E **549** | E **136,874** | E **561** |
| Colorado | E 2,765 | E 89 | E 21,452 | E 88 |
| Montana | 1,960 | 63 | E 15,737 | E 64 |
| Utah | 2,763 | 89 | 22,599 | 93 |
| Wyoming | 9,258 | 299 | 76,749 | 315 |
| Adjustment [1] | 273 | 9 | 338 | 1 |
| **PAD District V, Total** | **95,840** | **3,092** | **757,363** | **3,104** |
| Alaska [2] | 62,270 | 2,009 | 492,583 | 2,019 |
| South Alaska | 1,307 | 42 | 10,480 | 43 |
| North Slope | 60,962 | 1,967 | 482,109 | 1,976 |
| Adjustment for Alaska [1] | 1 | (s) | -6 | (s) |
| Arizona | 9 | (s) | 76 | (s) |
| California [2] | 30,011 | 968 | 239,078 | 980 |
| Nevada | 284 | 9 | 2,123 | 9 |
| Federal Offshore PAD District V | 2,742 | 88 | 20,995 | 86 |
| Adjustment for Arizona, California, and Nevada [1] | 524 | 17 | 2,508 | 10 |
| **U.S. Total[2]** | E **249,966** | E **8,063** | E **2,004,081** | E **8,213** |

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[1] These adjustments are used to reconcile the national and PAD District level sums of the State data with the independently estimated U.S. and Alaskan figures shown in the Summary Statistics portion of this issue and with the PAD District level figures published in a previous issue. Final data at the State, PAD District, and national levels will be published without adjustments in the *Petroleum Supply Annual*.

[2] Includes the following current month offshore production (thousand barrels): Alaska: State - 4,214; California: State - 2,313; Louisiana: State - 2,039; Texas: State - 70; U.S. Total, including Federal offshore - E34,741.

(s) = Less than 500 barrels or less than 500 barrels per day.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Source: State Conservation Agencies and the U.S. Minerals Management Service.

## Table 12. Natural Gas Processing Plant Net Production of Petroleum Products by PAD District, October 1988
(Thousand Barrels)

| Commodity | PAD District I | | | PAD District II | | | | PAD District III | | | | | | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | East Coast | Appalachian No.1 | Total | Ind., Ill., Ky. * | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast | |
| **Natural Gas Liquids** | **235** | **607** | **842** | **684** | **399** | **8,558** | **9,641** | **19,122** | **3,167** | **7,344** | **669** | **3,757** | **34,059** | **4,235** | **2,703** | **51,480** |
| Pentanes Plus | 31 | 71 | 102 | 133 | 100 | 1,234 | 1,467 | 3,504 | 248 | 1,307 | 180 | 434 | 5,673 | 791 | 1,393 | 9,426 |
| Liquefied Petroleum Gases | 204 | 536 | 740 | 551 | 299 | 7,324 | 8,174 | 15,618 | 2,919 | 6,037 | 489 | 3,323 | 28,386 | 3,444 | 1,310 | 42,054 |
| Ethane | 83 | 195 | 278 | 100 | 0 | 2,783 | 2,883 | 6,544 | 1,155 | 2,701 | 114 | 1,680 | 12,194 | 1,240 | 1 | 16,596 |
| Propane | 79 | 234 | 313 | 270 | 175 | 2,987 | 3,432 | 5,786 | 1,226 | 2,014 | 204 | 1,081 | 10,311 | 1,411 | 357 | 15,824 |
| Normal Butane | 38 | 74 | 112 | 97 | 118 | 1,040 | 1,255 | 2,400 | -964 | 683 | 122 | 376 | 2,617 | 541 | 719 | 5,244 |
| Isobutane | 4 | 33 | 37 | 84 | 6 | 514 | 604 | 888 | 1,502 | 639 | 49 | 186 | 3,264 | 252 | 233 | 4,390 |
| **Finished Petroleum Products** | **0** | **0** | **0** | **1** | **0** | **2** | **3** | **61** | **46** | **3** | **10** | **0** | **120** | **3** | **0** | **126** |
| Finished Motor Gasoline | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 9 | 0 | 0 | 0 | 10 | 0 | 0 | 10 |
| Finished Leaded Motor Gasoline | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 9 | 0 | 0 | 9 |
| Finished Unleaded Motor Gasoline | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| Finished Aviation Gasoline | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Naphtha-Type Jet Fuel | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Kerosene-Type Jet Fuel | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Kerosene | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Distillate Fuel Oil | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 37 | 2 | 0 | 0 | 39 | 0 | 0 | 39 |
| Special Naphthas | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Miscellaneous Products | 0 | 0 | 0 | 1 | 0 | 2 | 3 | 60 | 0 | 1 | 10 | 0 | 71 | 3 | 0 | 77 |
| **Total Production** | **235** | **607** | **842** | **685** | **399** | **8,560** | **9,644** | **19,183** | **3,213** | **7,347** | **679** | **3,757** | **34,179** | **4,238** | **2,703** | **51,606** |

* Effective January 1987 "Appalachian No.2" is combined with "Ind., Ill., Ky.".

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 13. Refinery Input of Crude Oil and Petroleum Products by PAD District, October 1988

(Thousand Barrels, Except Where Noted)

| Commodity | PAD District I | | | PAD District II | | | | PAD District III | | | | | | PAD Dist. IV | PAD Dist V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | East Coast | Appalachian No.1 | Total | Ind., Ill., Ky. * | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast | |
| **Crude Oil (including lease condensate)** | **36,165** | **3,301** | **39,466** | **58,124** | **9,524** | **20,646** | **88,294** | **15,486** | **95,627** | **70,874** | **4,891** | **2,164** | **189,042** | **12,964** | **79,070** | **408,836** |
| **Natural Gas Liquids** | | | | | | | | | | | | | | | | |
| Pentanes Plus | 7 | 0 | 7 | 396 | 95 | 888 | 1,379 | 1,021 | 1,183 | 750 | 174 | 104 | 3,232 | 95 | 156 | 4,869 |
| Liquefied Petroleum Gases | 114 | 51 | 165 | 1,646 | 340 | 888 | 2,874 | 811 | 1,771 | 2,239 | 127 | 65 | 5,013 | 410 | 728 | 9,190 |
| Ethane | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 75 | 0 | 0 | 75 | 0 | 0 | 75 |
| Propane | 0 | 0 | 0 | 76 | 0 | 0 | 76 | 0 | 124 | 58 | 0 | 0 | 182 | 0 | 0 | 258 |
| Normal Butane | 60 | 51 | 111 | 1,031 | 256 | 447 | 1,734 | 430 | 777 | 674 | 42 | 20 | 1,943 | 310 | 523 | 4,621 |
| Isobutane | 54 | 0 | 54 | 539 | 84 | 441 | 1,064 | 381 | 870 | 1,432 | 85 | 45 | 2,813 | 100 | 205 | 4,236 |
| **Other Liquids** | | | | | | | | | | | | | | | | |
| Other Hydrocarbons and Alcohol | 0 | 0 | 0 | 396 | 2 | 38 | 436 | 0 | 382 | 529 | 0 | 35 | 946 | 57 | 320 | 1,759 |
| Unfinished Oil (net) | 6,376 | 169 | 6,545 | -656 | -131 | 414 | -373 | 115 | 7,092 | -1,699 | 139 | 28 | 5,675 | -125 | 1,739 | 13,461 |
| Motor Gasoline Blending Components (net) | 881 | 38 | 919 | 1,987 | 122 | 536 | 2,645 | -116 | -552 | 521 | 36 | 28 | -83 | 347 | -43 | 3,785 |
| Aviation Gasoline Blending Components (net) | 0 | 0 | 0 | -5 | 0 | -28 | -33 | 0 | -52 | -1 | 0 | 0 | -53 | 0 | 5 | -81 |
| **Total Input to Refineries** | **43,543** | **3,559** | **47,102** | **61,888** | **9,952** | **23,382** | **95,222** | **17,317** | **105,451** | **73,213** | **5,367** | **2,424** | **203,772** | **13,748** | **81,975** | **441,819** |
| **Crude Oil Distillation** | | | | | | | | | | | | | | | | |
| Gross Input (daily average) | 1,171 | 107 | 1,278 | 1,882 | 307 | 667 | 2,856 | 504 | 3,105 | 2,313 | 156 | 70 | 6,147 | 421 | 2,612 | 13,315 |
| Operable Capacity (daily average) | 1,354 | 109 | 1,463 | 2,253 | 332 | 734 | 3,320 | 577 | 3,603 | 2,942 | 255 | 76 | 7,452 | 541 | 3,171 | 15,946 |
| Operating Ratio (percent)[1] | 86.5 | 97.7 | 87.4 | 83.5 | 92.5 | 90.8 | 86.0 | 87.3 | 86.2 | 78.6 | 61.1 | 92.4 | 82.5 | 78.0 | 82.4 | 83.5 |
| **Downstream Processing** | | | | | | | | | | | | | | | | |
| **Fresh Feed Input (daily average)** | | | | | | | | | | | | | | | | |
| Catalytic Cracking | 541 | 18 | 559 | 559 | 108 | 231 | 898 | 184 | 1,239 | 686 | 28 | 25 | 2,161 | 138 | 686 | 4,442 |
| Catalytic Hydrocracking | 46 | 0 | 46 | 100 | 0 | 5 | 105 | 13 | 180 | 200 | 1 | 0 | 394 | 6 | 370 | 921 |
| Cokers | 69 | 0 | 69 | 115 | 48 | 63 | 225 | 8 | 199 | 343 | 11 | 0 | 561 | 16 | 473 | 1,344 |
| **Crude Oil Qualities** | | | | | | | | | | | | | | | | |
| Sulfur Content, Weighted Average (percent) | 1.27 | 57 | 1.22 | 1.03 | 2.04 | 60 | 1.04 | 85 | 92 | 1.23 | 1.30 | 78 | 1.03 | 65 | 1.10 | 1.05 |
| API Gravity, Weighted Average | 29.33 | 38.55 | 30.07 | 34.67 | 29.63 | 36.72 | 34.60 | 38.26 | 33.85 | 31.43 | 33.27 | 39.96 | 33.36 | 36.34 | 25.26 | 31.86 |
| **Operable Capacity (daily average)** | **1,354** | **109** | **1,463** | **2,253** | **332** | **734** | **3,320** | **577** | **3,603** | **2,942** | **255** | **76** | **7,452** | **541** | **3,171** | **15,946** |
| Operating | 1,341 | 109 | 1,450 | 2,187 | 332 | 734 | 3,253 | 512 | 3,412 | 2,588 | 248 | 76 | 6,835 | 533 | 3,044 | 15,114 |
| Idle | 13 | 0 | 13 | 67 | 0 | 0 | 67 | 65 | 191 | 354 | 7 | 0 | 617 | 8 | 127 | 832 |
| **Alaskan Crude Oil Receipts** | **1,587** | **0** | **1,587** | **1,698** | **0** | **459** | **2,157** | **0** | **4,077** | **2,546** | **47** | **0** | **6,670** | **0** | **43,168** | **53,582** |

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[1] Represents gross input divided by operable capacity

(s) = Less than 500 barrels

* Effective January 1987 "Appalachian No 2" is combined with "Ind., Ill., Ky"

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 14. Refinery Net Production of Petroleum Products by PAD District, October 1988
(Thousand Barrels)

| Commodity | PAD District I | | | PAD District II | | | | PAD District III | | | | | | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | East Coast | Appalachian No.1 | Total | Ind., Ill., Ky. * | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast | |
| Liquefied Refinery Gases | 1,792 | 59 | 1,851 | 1,720 | 252 | 341 | 2,313 | 281 | 4,531 | 4,431 | 91 | 77 | 9,411 | 246 | 2,066 | 15,887 |
| Ethane | 128 | 27 | 155 | 3 | 0 | 0 | 3 | -74 | 137 | 0 | 0 | 0 | 63 | 0 | 49 | 270 |
| Propane | 1,430 | 32 | 1,462 | 1,735 | 235 | 474 | 2,444 | 468 | 3,629 | 1,964 | 79 | 63 | 6,203 | 196 | 1,204 | 11,509 |
| Normal Butane | 189 | 0 | 189 | 8 | 16 | -133 | -109 | -269 | 730 | 2,430 | 12 | 9 | 2,912 | 50 | 747 | 3,789 |
| Isobutane | 45 | 0 | 45 | -26 | 1 | 0 | -25 | 156 | 35 | 37 | 0 | 5 | 233 | 0 | 66 | 319 |
| Finished Motor Gasoline | 20,349 | 1,326 | 21,675 | 33,129 | 5,154 | 13,323 | 51,606 | 9,386 | 49,852 | 34,357 | 1,678 | 1,409 | 96,682 | 7,074 | 36,085 | 213,122 |
| Finished Leaded Motor Gasoline | 1,814 | 187 | 2,001 | 3,757 | 997 | 3,832 | 8,586 | 2,285 | 5,634 | 5,838 | 429 | 482 | 14,668 | 2,253 | 9,205 | 36,713 |
| Finished Unleaded Motor Gasoline | 18,535 | 1,139 | 19,674 | 29,372 | 4,157 | 9,491 | 43,020 | 7,101 | 44,218 | 28,519 | 1,249 | 927 | 82,014 | 4,821 | 26,880 | 176,409 |
| Finished Aviation Gasoline | 30 | 0 | 30 | 49 | 21 | 15 | 85 | 132 | 361 | 62 | 0 | 0 | 555 | 14 | 139 | 823 |
| Naphtha-Type Jet Fuel | 761 | 0 | 761 | 306 | 20 | 262 | 588 | 770 | 908 | 761 | 214 | 189 | 2,842 | 489 | 1,762 | 6,442 |
| Kerosene-Type Jet Fuel | 1,871 | 0 | 1,871 | 2,846 | 454 | 1,294 | 4,594 | 991 | 9,026 | 9,082 | 119 | 40 | 19,258 | 691 | 9,492 | 35,906 |
| Kerosene | 249 | 92 | 341 | 478 | -49 | 23 | 452 | 118 | 827 | 487 | 23 | 0 | 1,455 | 55 | 165 | 2,468 |
| Distillate Fuel Oil | 9,160 | 1,092 | 10,252 | 13,361 | 2,403 | 5,294 | 21,058 | 3,482 | 19,784 | 14,566 | 1,302 | 548 | 39,682 | 3,453 | 13,233 | 87,678 |
| Residual Fuel Oil | 4,149 | 83 | 4,232 | 1,639 | 242 | 193 | 2,074 | 494 | 5,684 | 2,240 | 245 | 12 | 8,675 | 342 | 11,420 | 26,743 |
| Naphtha < 400 Deg. for Petro. Feed. Use | 184 | 0 | 184 | 718 | 0 | 60 | 778 | 100 | 1,859 | 128 | 32 | -1 | 2,118 | 28 | 180 | 3,288 |
| Other Oils > 400 Deg. for Petro. Feed. Use | 8 | 0 | 8 | 482 | 0 | 57 | 539 | 164 | 3,884 | 1,830 | 0 | 0 | 5,878 | 11 | 303 | 6,739 |
| Special Naphthas | 157 | 29 | 186 | 363 | 0 | 242 | 605 | 96 | 1,001 | 60 | 170 | 0 | 1,327 | -6 | 100 | 2,212 |
| Lubricants | 328 | 420 | 748 | 590 | 0 | 286 | 876 | 18 | 2,110 | 557 | 424 | 0 | 3,109 | 5 | 457 | 5,195 |
| Waxes | 0 | 95 | 95 | 24 | 0 | 33 | 57 | 26 | 123 | 55 | 54 | 0 | 258 | 62 | 49 | 521 |
| Petroleum Coke | 1,327 | 0 | 1,327 | 1,845 | 503 | 698 | 3,046 | 338 | 3,377 | 3,546 | 119 | 19 | 7,399 | 315 | 4,295 | 16,382 |
| Marketable | 342 | 0 | 342 | 1,016 | 360 | 416 | 1,792 | 38 | 1,666 | 2,731 | 78 | 0 | 4,513 | 151 | 3,249 | 10,047 |
| Catalyst | 985 | 0 | 985 | 829 | 143 | 282 | 1,254 | 300 | 1,711 | 815 | 41 | 19 | 2,886 | 164 | 1,046 | 6,335 |
| Asphalt and Road Oil | 3,546 | 230 | 3,776 | 3,695 | 884 | 1,037 | 5,616 | 520 | 797 | 1,338 | 772 | 105 | 3,532 | 609 | 2,204 | 15,737 |
| Still Gas | 1,761 | 151 | 1,912 | 2,645 | 327 | 1,102 | 4,074 | 743 | 5,222 | 3,326 | 163 | 86 | 9,540 | 571 | 4,465 | 20,562 |
| Miscellaneous Products | 373 | 44 | 417 | 378 | 37 | 58 | 473 | 34 | 767 | 403 | 0 | 0 | 1,204 | 57 | 78 | 2,229 |
| Fuel Use | 13 | 1 | 14 | 0 | 0 | 0 | 0 | 1 | 0 | 40 | 0 | 0 | 41 | 0 | 5 | 60 |
| Non-Fuel Use | 360 | 43 | 403 | 378 | 37 | 58 | 473 | 33 | 767 | 363 | 0 | 0 | 1,163 | 57 | 73 | 2,169 |
| **Total Production** | **46,045** | **3,621** | **49,666** | **64,268** | **10,248** | **24,318** | **98,834** | **17,693** | **110,113** | **77,229** | **5,406** | **2,484** | **212,925** | **14,016** | **86,493** | **461,934** |
| Processing Gain(-) or Loss(+)[1] | -2,502 | -62 | -2,564 | -2,380 | -296 | -936 | -3,612 | -376 | -4,662 | -4,016 | -39 | -60 | -9,153 | -268 | -4,518 | -20,115 |

[1] Represents the arithmetic difference between input and output.

* Effective January 1987 "Appalachian No.2" is combined with "Ind., Ill., Ky.".

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 15. Percent Refinery Yield of Petroleum Products by PAD District,[1] October 1988

| Commodity | PAD District I | | | PAD District II | | | | PAD District III | | | | | | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | East Coast | Appalachian No.1 | Total | Ind., Ill., Ky. * | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast | |
| Liquefied Refinery Gases | 4.2 | 1.7 | 4.0 | 3.0 | 2.7 | 1.6 | 2.6 | 1.8 | 4.4 | 6.4 | 1.8 | 3.5 | 4.8 | 1.9 | 2.6 | 3.8 |
| Finished Motor Gasoline[2] | 45.5 | 35.6 | 44.7 | 49.9 | 48.9 | 52.1 | 50.4 | 49.2 | 45.8 | 43.8 | 26.7 | 53.7 | 45.0 | 48.0 | 43.2 | 45.8 |
| Finished Aviation Gasoline[3] | .1 | .0 | .1 | .1 | .2 | .2 | .1 | .8 | .4 | .1 | .0 | .0 | .3 | .1 | .2 | .2 |
| Naphtha-Type Jet Fuel | 1.8 | 0 | 1.7 | .5 | .2 | 1.2 | .7 | 4.9 | .9 | 1.1 | 4.3 | 8.6 | 1.5 | 3.8 | 2.2 | 1.5 |
| Kerosene-Type Jet Fuel | 4.4 | .0 | 4.1 | 5.0 | 4.8 | 6.1 | 5.2 | 6.4 | 8.8 | 13.1 | 2.4 | 1.8 | 9.9 | 5.4 | 11.7 | 8.5 |
| Kerosene | .6 | 2.7 | .7 | .8 | -.5 | .1 | .5 | .8 | .8 | .7 | .5 | 0 | .7 | .4 | .2 | .6 |
| Distillate Fuel Oil | 21.5 | 31.5 | 22.3 | 23.2 | 25.6 | 25.1 | 24.0 | 22.3 | 19.3 | 21.1 | 25.9 | 25.0 | 20.4 | 26.9 | 16.4 | 20.8 |
| Residual Fuel Oil | 9.8 | 2.4 | 9.2 | 2.9 | 2.6 | .9 | 2.4 | 3.2 | 5.5 | 3.2 | 4.9 | .5 | 4.5 | 2.7 | 14.1 | 6.3 |
| Naphtha < 400 Deg. for Petro. Feed. Use | .4 | 0 | .4 | 1.2 | 0 | .3 | .9 | .6 | 1.8 | .2 | .6 | .0 | 1.1 | .2 | .2 | .8 |
| Other Oils > 400 Deg. for Petro. Feed. Use | .0 | 0 | .0 | .8 | 0 | .3 | .6 | 1.1 | 3.8 | 2.6 | 0 | 0 | 3.0 | .1 | .4 | 1.6 |
| Special Naphthas | .4 | .8 | .4 | .6 | 0 | 1.1 | .7 | .6 | 1.0 | .1 | 3.4 | 0 | .7 | .0 | .1 | .5 |
| Lubricants | .8 | 12.1 | 1.6 | 1.0 | 0 | 1.4 | 1.0 | .1 | 2.1 | .8 | 8.4 | 0 | 1.6 | .0 | .6 | 1.2 |
| Waxes | 0 | 2.7 | .2 | .0 | 0 | .2 | .1 | .2 | .1 | .1 | 1.1 | 0 | .1 | .5 | .1 | .1 |
| Petroleum Coke | 3.1 | 0 | 2.9 | 3.2 | 5.4 | 3.3 | 3.5 | 2.2 | 3.3 | 5.1 | 2.4 | .9 | 3.8 | 2.5 | 5.3 | 3.9 |
| Asphalt and Road Oil | 8.3 | 6.6 | 8.2 | 6.4 | 9.4 | 4.9 | 6.4 | 3.3 | .8 | 1.9 | 15.3 | 4.8 | 1.8 | 4.7 | 2.7 | 3.7 |
| Still Gas | 4.1 | 4.4 | 4.2 | 4.6 | 3.5 | 5.2 | 4.6 | 4.8 | 5.1 | 4.8 | 3.2 | 3.9 | 4.9 | 4.4 | 5.5 | 4.9 |
| Miscellaneous Products | .9 | 1.3 | .9 | .7 | .4 | .3 | .5 | .2 | .7 | .6 | 0 | 0 | .6 | .4 | .1 | .5 |
| Processing Gain(-) or Loss(+)[4] | -5.9 | -1.8 | -5.6 | -4.1 | -3.2 | -4.4 | -4.1 | -2.4 | -4.5 | -5.8 | -.8 | -2.7 | -4.7 | -2.1 | -5.6 | -4.8 |

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[1] Based on crude oil input and net reruns of unfinished oils.

[2] Based on total finished motor gasoline output plus net output of motor gasoline blending components, minus input of natural gas plant liquids, other hydrocarbons and alcohol.

[3] Based on finished aviation gasoline output plus net output of aviation gasoline blending components.

[4] Represents the difference between Input and Production.

Note: Total may not equal sum of components due to independent rounding.

* Effective January 1987 "Appalachian No.2" is combined with "Ind., Ill., Ky.".

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 16. Imports of Crude Oil and Petroleum Products by PAD District, October 1988
(Thousand Barrels)

| Commodity | Petroleum Administration for Defense Districts | | | | | | Daily Average |
|---|---|---|---|---|---|---|---|
| | I | II | III | IV | V | Total | |
| **Crude Oil (including lease condensate)** 1 2 | **40,611** | **33,542** | **90,580** | **1,480** | **5,598** | **171,811** | **5,542** |
| **Natural Gas Liquids** | **1,046** | **2,664** | **2,551** | **368** | **406** | **7,035** | **227** |
| Pentanes Plus | 241 | 28 | 4 | 62 | 0 | 335 | 11 |
| Liquefied Petroleum Gases | 805 | 2,636 | 2,547 | 306 | 406 | 6,700 | 216 |
| Ethane | 34 | 0 | (s) | 0 | 1 | 36 | 1 |
| Propane | 389 | 1,638 | 943 | 211 | 30 | 3,212 | 104 |
| Normal Butane | 248 | 648 | 1,043 | 62 | 244 | 2,244 | 72 |
| Isobutane | 133 | 349 | 561 | 33 | 131 | 1,208 | 39 |
| **Other Liquids** 1 | **5,279** | **0** | **6,469** | **0** | **0** | **11,748** | **379** |
| Unfinished Oils 1 | 4,048 | 0 | 6,204 | 0 | 0 | 10,252 | 331 |
| Naphthas and Lighter | 3 | 0 | 1,417 | 0 | 0 | 1,420 | 46 |
| Kerosene and Light Gas Oils | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Heavy Gas Oils | 3,354 | 0 | 1,807 | 0 | 0 | 5,161 | 166 |
| Residuum | 691 | 0 | 2,980 | 0 | 0 | 3,671 | 118 |
| Motor Gasoline Blending Components | 1,231 | 0 | 265 | 0 | 0 | 1,496 | 48 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Finished Petroleum Products** | **39,744** | **1,377** | **3,435** | **155** | **2,351** | **47,062** | **1,518** |
| Finished Motor Gasoline | 10,099 | 211 | 0 | 37 | 891 | 11,238 | 363 |
| Finished Leaded Motor Gasoline | 57 | 0 | 0 | 0 | 3 | 60 | 2 |
| Finished Unleaded Motor Gasoline | 10,042 | 211 | 0 | 37 | 888 | 11,178 | 361 |
| Finished Aviation Gasoline | 0 | 0 | 0 | 0 | 4 | 4 | (s) |
| Naphtha-Type Jet Fuel | 0 | 83 | 0 | 0 | 0 | 83 | 3 |
| Kerosene-Type Jet Fuel | 2,868 | 462 | 234 | 0 | 644 | 4,208 | 136 |
| Bonded Aircraft Fuel | 1,085 | 462 | 114 | 0 | 522 | 2,183 | 70 |
| Other | 1,783 | 0 | 120 | 0 | 122 | 2,025 | 65 |
| Kerosene | 527 | 0 | 330 | 0 | 0 | 857 | 28 |
| Distillate Fuel Oil | 9,661 | 230 | 0 | 117 | 47 | 10,055 | 324 |
| Bonded Ships Bunkers | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 9,661 | 230 | 0 | 117 | 47 | 10,055 | 324 |
| Residual Fuel Oil | 14,912 | 247 | 298 | 0 | 736 | 16,193 | 522 |
| Bonded Ships Bunkers | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 14,912 | 247 | 298 | 0 | 736 | 16,193 | 522 |
| Naphtha < 400 Deg. for Petro. Feed. Use | 196 | 13 | 2,115 | 0 | 0 | 2,324 | 75 |
| Other Oils > 400 Deg. for Petro. Feed. Use | 0 | 0 | 252 | 0 | 0 | 252 | 8 |
| Special Naphthas | 12 | 35 | 164 | 0 | 7 | 218 | 7 |
| Lubricants | 325 | 14 | 0 | 0 | 0 | 339 | 11 |
| Waxes | 35 | 15 | 0 | 1 | 3 | 54 | 2 |
| Petroleum Coke | 0 | 0 | 2 | 0 | 19 | 21 | 1 |
| Asphalt and Road Oil | 1,054 | 63 | 33 | 0 | 0 | 1,150 | 37 |
| Miscellaneous Products | 55 | 4 | 7 | 0 | 0 | 66 | 2 |
| **Total Imports** | **86,680** | **37,583** | **103,034** | **2,003** | **8,355** | **237,656** | **7,666** |

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[1] Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

[2] Includes crude oil imported for storage in the Strategic Petroleum Reserve.

(s) = Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 17. Year-to-Date Imports of Crude Oil and Petroleum Products by PAD District, January - October 1988
(Thousand Barrels)

| Commodity | Petroleum Administration for Defense Districts | | | | | | Total (Daily Average) |
|---|---|---|---|---|---|---|---|
| | I | II | III | IV | V | Total | |
| **Crude Oil (including lease condensate)** 1 2 | **358,079** | **278,409** | **829,112** | **18,627** | **49,881** | **1,534,108** | **5,030** |
| **Natural Gas Liquids** | **12,613** | **26,369** | **19,748** | **3,822** | **2,701** | **65,253** | **214** |
| Pentanes plus | 2,405 | 338 | 227 | 269 | 0 | 3,239 | 11 |
| Liquefied Petroleum Gases | 10,208 | 26,031 | 19,521 | 3,553 | 2,701 | 62,014 | 203 |
| Ethane | 100 | 191 | 63 | 1 | 39 | 393 | 1 |
| Propane | 6,433 | 17,310 | 6,107 | 1,813 | 414 | 32,076 | 105 |
| Normal Butane | 2,295 | 5,381 | 8,556 | 1,094 | 1,424 | 18,749 | 61 |
| Isobutane | 1,381 | 3,149 | 4,796 | 645 | 825 | 10,795 | 35 |
| **Other Liquids** 1 | **51,768** | **1,126** | **70,789** | **0** | **1,175** | **124,858** | **409** |
| Unfinished Oils 1 | 36,442 | 1,105 | 69,123 | 0 | 855 | 107,525 | 353 |
| Naphthas and Lighter | 1,784 | 238 | 14,951 | 0 | 254 | 17,227 | 56 |
| Kerosene and Light Gas Oils | 217 | 0 | 1,710 | 0 | 0 | 1,927 | 6 |
| Heavy Gas Oils | 26,952 | 499 | 10,750 | 0 | 357 | 38,558 | 126 |
| Residuum | 7,489 | 368 | 41,712 | 0 | 244 | 49,813 | 163 |
| Motor Gasoline Blending Components | 15,326 | 21 | 1,666 | 0 | 320 | 17,333 | 57 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Finished Petroleum Products** | **371,839** | **10,276** | **35,609** | **1,249** | **17,342** | **436,315** | **1,431** |
| Finished Motor Gasoline | 106,674 | 1,135 | 3,009 | 496 | 7,264 | 118,578 | 389 |
| Finished Leaded Motor Gasoline | 3,214 | 27 | 39 | 27 | 222 | 3,529 | 12 |
| Finished Unleaded Motor Gasoline | 103,460 | 1 108 | 2,970 | 469 | 7,042 | 115,049 | 377 |
| Finished Aviation Gasoline | 0 | 0 | 25 | 0 | 113 | 138 | (s) |
| Naphtha-Type Jet Fuel | 0 | 857 | 0 | 0 | 30 | 887 | 3 |
| Kerosene-Type Jet Fuel | 17,163 | 4,194 | 1,225 | 0 | 3,902 | 26,484 | 87 |
| Bonded Aircraft Fuel | 9,582 | 4,194 | 723 | 0 | 2,914 | 17,413 | 57 |
| Other | 7,581 | 0 | 502 | 0 | 988 | 9,071 | 30 |
| Kerosene | 2,793 | 0 | 1,273 | 0 | 0 | 4,066 | 13 |
| Distillate Fuel Oil | 77,400 | 1,634 | 602 | 722 | 898 | 81,256 | 266 |
| Bonded Ships Bunkers | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 77,400 | 1,634 | 602 | 722 | 898 | 81,256 | 266 |
| Residual Fuel Oil | 153,162 | 1,142 | 7,115 | 2 | 3,477 | 164,898 | 541 |
| Bonded Ships Bunkers | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 153,162 | 1,142 | 7,115 | 2 | 3,477 | 164,898 | 541 |
| Naphtha < 400 Deg. for Petro. Feed Use | 2,115 | 137 | 18,155 | 0 | 291 | 20,698 | 68 |
| Other Oils > 400 Deg. for Petro. Feed Use | 228 | 0 | 797 | 0 | 524 | 1,549 | 5 |
| Special Naphthas | 409 | 511 | 2,591 | 1 | 86 | 3,598 | 12 |
| Lubricants | 2,651 | 131 | 220 | 0 | 86 | 3,088 | 10 |
| Waxes | 282 | 131 | 14 | 9 | 47 | 483 | 2 |
| Petroleum Coke | 37 | 0 | 136 | 0 | 176 | 349 | 1 |
| Asphalt and Road Oil | 8,494 | 369 | 388 | 19 | 448 | 9,718 | 32 |
| Miscellaneous Products | 431 | 35 | 59 | 0 | 0 | 525 | 2 |
| **Total Imports** | **794,299** | **316,180** | **955,258** | **23,698** | **71,099** | **2,160,533** | **7,084** |

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[1] Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

[2] Includes crude oil imported for storage in the Strategic Petroleum Reserve.

(s) = Less than 500 barrels

Note Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 18. Imports of Crude Oil and Petroleum Products by Source and PAD District,[1] October 1988
(Thousand Barrels)

| Source | Crude Oil [2] | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Products [3] | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | All PAD Districts | | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Algeria | 3,878 | 1,363 | 691 | 0 | 0 | 25 | 0 | 875 | 1,812 | 0 | 1,472 | 6,238 | 10,116 | 326 |
| Iraq | 14,383 | 0 | 123 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 123 | 14,506 | 468 |
| Kuwait | 0 | 0 | 0 | 0 | 0 | 45 | 0 | 0 | 0 | 0 | 0 | 45 | 45 | 1 |
| Saudi Arabia | 33,040 | 0 | 2,897 | 0 | 1,022 | 732 | 0 | 885 | 0 | 0 | 0 | 5,536 | 38,576 | 1,244 |
| United Arab Emirates | 0 | 482 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 482 | 482 | 16 |
| Subtotal Arab OPEC | 51,301 | 1,845 | 3,711 | 0 | 1,022 | 802 | 0 | 1,760 | 1,812 | 0 | 1,472 | 12,423 | 63,724 | 2,056 |
| **Other OPEC** | | | | | | | | | | | | | | |
| Ecuador | 1,465 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 361 | 0 | 0 | 361 | 1,826 | 59 |
| Gabon | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 323 | 0 | 0 | 323 | 323 | 10 |
| Indonesia | 6,198 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 503 | 0 | 0 | 503 | 6,701 | 216 |
| Nigeria | 20,572 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 681 | 0 | 0 | 681 | 21,253 | 686 |
| Venezuela | 11,982 | 289 | 1,503 | 475 | 1,396 | 979 | 0 | 3,663 | 2,312 | 0 | 907 | 11,524 | 23,506 | 758 |
| Subtotal Other OPEC | 40,217 | 289 | 1,503 | 475 | 1,396 | 979 | 0 | 3,663 | 4,180 | 0 | 907 | 13,392 | 53,609 | 1,729 |
| **Other** | | | | | | | | | | | | | | |
| Angola | 7,859 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 73 | 0 | 0 | 73 | 7,932 | 256 |
| Argentina | 542 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 164 | 17 | 0 | 181 | 723 | 23 |
| Australia | 854 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 854 | 28 |
| Bahama Islands | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 354 | 0 | 0 | 354 | 354 | 11 |
| Belgium | 0 | 0 | 245 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 245 | 245 | 8 |
| Benin | 370 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 370 | 12 |
| Bermuda | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | (s) |
| Brazil | 0 | 0 | 0 | 28 | 3,679 | 0 | 0 | 216 | 617 | 0 | 1 | 4,541 | 4,541 | 146 |
| Cameroon | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 333 | 0 | 0 | 333 | 333 | 11 |
| Canada | 18,536 | 3,866 | 291 | 15 | 1,782 | 298 | 32 | 2,457 | 1,014 | 175 | 630 | 10,560 | 29,096 | 939 |
| China, People's Republic of | 3,705 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 16 | 3,721 | 120 |
| Colombia | 4,098 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 681 | 0 | 0 | 681 | 4,779 | 154 |
| Congo | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 331 | 0 | 0 | 331 | 331 | 11 |
| Egypt | 1,125 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,125 | 36 |
| France | 0 | 0 | 341 | 0 | 402 | 0 | 0 | 0 | 0 | 0 | 4 | 747 | 747 | 24 |
| Germany FD (W) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | (s) |
| Greece | 0 | 0 | 0 | 0 | 0 | 251 | 0 | 0 | 305 | 0 | 0 | 556 | 556 | 18 |
| Guatemala | 219 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 219 | 7 |
| India | 0 | 0 | 493 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 323 | 816 | 816 | 26 |
| Italy | 305 | 0 | 855 | 0 | 678 | 37 | 0 | 0 | 0 | 4 | 0 | 1,574 | 1,879 | 61 |
| Japan | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 1 | 23 | 23 | 1 |
| Korea, Republic of | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | (s) |
| Malaysia | 601 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 601 | 19 |
| Mexico | 20,781 | 695 | 0 | 0 | 101 | 833 | 0 | 0 | 382 | 0 | 253 | 2,264 | 23,045 | 743 |
| Netherlands Antilles | 0 | 0 | 105 | 0 | 0 | 0 | 0 | 216 | 215 | 0 | 0 | 536 | 536 | 17 |
| Netherlands | 0 | 2 | 713 | 0 | 493 | 0 | 0 | 0 | 0 | 0 | 19 | 1,227 | 1,227 | 40 |
| Norway | 4,426 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,426 | 143 |
| Panama | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | (s) |
| Peru | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 662 | 0 | 0 | 662 | 662 | 21 |
| Portugal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 175 | 0 | 0 | 175 | 175 | 6 |
| Puerto Rico | 0 | 0 | 104 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 543 | 647 | 647 | 21 |
| Romania | 0 | 0 | 0 | 554 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 554 | 554 | 18 |

See footnotes at end of table.

## Table 18. Imports of Crude Oil and Petroleum Products by Source and PAD District,[1] October 1988 (continued)
(Thousand Barrels)

| Source | Crude Oil 2 | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Products 3 | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **All PAD Districts (continued)** | | | | | | | | | | | | | |
| **Other (continued)** | | | | | | | | | | | | | | |
| Singapore | 0 | 0 | 0 | 0 | 0 | 281 | 0 | 0 | 233 | 0 | 0 | 514 | 514 | 17 |
| South Africa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 14 | 14 | (s) |
| Spain | 0 | 0 | 193 | 0 | 500 | 296 | 0 | 0 | 0 | 0 | 307 | 1,296 | 1,296 | 42 |
| Sweden | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 329 | 0 | 0 | 329 | 329 | 11 |
| Syria | 897 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 897 | 29 |
| Thailand | 450 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 450 | 15 |
| Trinidad and Tobago | 1,906 | 0 | 0 | 0 | 70 | 0 | 0 | 128 | 941 | 0 | 0 | 1,139 | 3,045 | 98 |
| Turkey | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 53 | 53 | 53 | 2 |
| United Kingdom | 12,148 | 0 | 0 | 0 | 247 | 0 | 0 | 0 | 1,474 | 0 | 0 | 1,721 | 13,869 | 447 |
| U.S.S.R. | 0 | 0 | 373 | 0 | 0 | 0 | 0 | 229 | 0 | 0 | 0 | 602 | 602 | 19 |
| Virgin Islands | 0 | 0 | 1,324 | 424 | 868 | 515 | 825 | 1,386 | 1,918 | 0 | 0 | 7,260 | 7,260 | 234 |
| Yemen (Sanaa) | 599 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 599 | 19 |
| Zaire | 872 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 872 | 28 |
| Subtotal Other | 80,293 | 4,566 | 5,038 | 1,021 | 8,820 | 2,511 | 857 | 4,632 | 10,201 | 218 | 2,166 | 40,030 | 120,323 | 3,881 |
| **Total Imports** | **171,811** | **6,700** | **10,252** | **1,496** | **11,238** | **4,291** | **857** | **10,055** | **16,193** | **218** | **4,545** | **65,845** | **237,656** | **7,666** |
| | **PAD District I** | | | | | | | | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Algeria | 0 | 283 | 691 | 0 | 0 | 25 | 0 | 875 | 1,713 | 0 | 0 | 3,587 | 3,587 | 116 |
| Iraq | 1,189 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,189 | 38 |
| Saudi Arabia | 7,919 | 0 | 0 | 0 | 406 | 511 | 0 | 885 | 0 | 0 | 0 | 1,802 | 9,721 | 314 |
| Subtotal Arab OPEC | 9,108 | 283 | 691 | 0 | 406 | 536 | 0 | 1,760 | 1,713 | 0 | 0 | 5,389 | 14,497 | 468 |
| **Other OPEC** | | | | | | | | | | | | | | |
| Ecuador | 726 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 361 | 0 | 0 | 361 | 1,087 | 35 |
| Gabon | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 323 | 0 | 0 | 323 | 323 | 10 |
| Nigeria | 8,589 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 681 | 0 | 0 | 681 | 9,270 | 299 |
| Venezuela | 2,766 | 0 | 358 | 238 | 1,396 | 846 | 0 | 3,663 | 2,312 | 0 | 654 | 9,467 | 12,233 | 395 |
| Subtotal Other OPEC | 12,081 | 0 | 358 | 238 | 1,396 | 846 | 0 | 3,663 | 3,677 | 0 | 654 | 10,832 | 22,913 | 739 |
| **Other** | | | | | | | | | | | | | | |
| Angola | 4,533 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 73 | 0 | 0 | 73 | 4,606 | 149 |
| Argentina | 542 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 164 | 0 | 0 | 164 | 706 | 23 |
| Bahama Islands | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 354 | 0 | 0 | 354 | 354 | 11 |
| Benin | 370 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 370 | 12 |
| Brazil | 0 | 0 | 0 | 0 | 3,679 | 0 | 0 | 216 | 617 | 0 | 1 | 4,513 | 4,513 | 146 |
| Cameroon | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 333 | 0 | 0 | 333 | 333 | 11 |
| Canada | 2,161 | 521 | 3 | 15 | 1,480 | 209 | 32 | 2,063 | 767 | 4 | 144 | 5,238 | 7,399 | 239 |
| China, People's Republic of | 1,436 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 16 | 1,452 | 47 |
| Colombia | 508 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 681 | 0 | 0 | 681 | 1,189 | 38 |
| Congo | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 331 | 0 | 0 | 331 | 331 | 11 |
| Egypt | 681 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 681 | 22 |
| France | 0 | 0 | 0 | 0 | 282 | 0 | 0 | 0 | 0 | 0 | 4 | 286 | 286 | 9 |
| Germany FD (W) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | (s) |
| Greece | 0 | 0 | 0 | 0 | 0 | 251 | 0 | 0 | 305 | 0 | 0 | 556 | 556 | 18 |

See footnotes at end of table

## Table 18. Imports of Crude Oil and Petroleum Products by Source and PAD District,[1] October 1988 (continued)
(Thousand Barrels)

| Source | Crude Oil [2] | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Products [3] | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **PAD District I (continued)** | | | | | | | | | | | | | |
| **Other (continued)** | | | | | | | | | | | | | | |
| Italy | 305 | 0 | 855 | 0 | 678 | 37 | 0 | 0 | 0 | 4 | 0 | 1,574 | 1,879 | 61 |
| Japan | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 1 | 5 | 5 | (s) |
| Korea, Republic of | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | (s) |
| Mexico | 2,012 | 0 | 0 | 0 | 0 | 178 | 0 | 0 | 183 | 0 | 241 | 602 | 2,614 | 84 |
| Netherlands Antilles | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 216 | 215 | 0 | 0 | 431 | 431 | 14 |
| Netherlands | 0 | 0 | 713 | 0 | 493 | 0 | 0 | 0 | 0 | 0 | 0 | 1,206 | 1,206 | 39 |
| Norway | 2,656 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,656 | 86 |
| Peru | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 662 | 0 | 0 | 662 | 662 | 21 |
| Portugal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 175 | 0 | 0 | 175 | 175 | 6 |
| Puerto Rico | 0 | 0 | 104 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 531 | 635 | 635 | 20 |
| Romania | 0 | 0 | 0 | 554 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 554 | 554 | 18 |
| South Africa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 5 | (s) |
| Spain | 0 | 0 | 0 | 0 | 500 | 296 | 0 | 0 | 0 | 0 | 307 | 1,103 | 1,103 | 36 |
| Sweden | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 329 | 0 | 0 | 329 | 329 | 11 |
| Syria | 897 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 897 | 29 |
| Trinidad and Tobago | 490 | 0 | 0 | 0 | 70 | 0 | 0 | 128 | 941 | 0 | 0 | 1,139 | 1,629 | 53 |
| United Kingdom | 2,649 | 0 | 0 | 0 | 247 | 0 | 0 | 0 | 1,474 | 0 | 0 | 1,721 | 4,370 | 141 |
| U.S.S.R. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 229 | 0 | 0 | 0 | 229 | 229 | 7 |
| Virgin Islands | 0 | 0 | 1,324 | 424 | 868 | 515 | 495 | 1,386 | 1,918 | 0 | 0 | 6,930 | 6,930 | 224 |
| Zaire | 182 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 182 | 6 |
| Subtotal Other | 19,422 | 522 | 2,999 | 993 | 8,297 | 1,486 | 527 | 4,238 | 9,522 | 12 | 1,252 | 29,847 | 49,269 | 1,589 |
| **Total Imports** | **40,611** | **805** | **4,048** | **1,231** | **10,099** | **2,868** | **527** | **9,661** | **14,912** | **12** | **1,906** | **46,069** | **86,680** | **2,796** |
| | **PAD District II** | | | | | | | | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Algeria | 819 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 819 | 26 |
| Iraq | 2,152 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,152 | 69 |
| Saudi Arabia | 3,600 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,600 | 116 |
| Subtotal Arab OPEC | 6,571 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6,571 | 212 |
| **Other OPEC** | | | | | | | | | | | | | | |
| Nigeria | 6,128 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6,128 | 198 |
| Venezuela | 0 | 0 | 0 | 0 | 0 | 132 | 0 | 0 | 0 | 0 | 0 | 132 | 132 | 4 |
| Subtotal Other OPEC | 6,128 | 0 | 0 | 0 | 0 | 132 | 0 | 0 | 0 | 0 | 0 | 132 | 6,260 | 202 |
| **Other** | | | | | | | | | | | | | | |
| Canada | 14,805 | 2,636 | 0 | 0 | 211 | 83 | 0 | 230 | 247 | 35 | 129 | 3,571 | 18,376 | 593 |
| Colombia | 450 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 450 | 15 |
| Egypt | 444 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 444 | 14 |
| Mexico | 2,378 | 0 | 0 | 0 | 0 | 330 | 0 | 0 | 0 | 0 | 0 | 330 | 2,708 | 87 |
| South Africa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 8 | 8 | (s) |
| United Kingdom | 2,601 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,601 | 84 |
| Zaire | 165 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 165 | 5 |
| Subtotal Other | 20,843 | 2,636 | 0 | 0 | 211 | 413 | 0 | 230 | 247 | 35 | 137 | 3,909 | 24,752 | 798 |
| **Total Imports** | **33,542** | **2,636** | **0** | **0** | **211** | **545** | **0** | **230** | **247** | **35** | **137** | **4,041** | **37,583** | **1,212** |

See footnotes at end of table.

**Table 18. Imports of Crude Oil and Petroleum Products by Source and PAD District,[1] October 1988** (continued)
(Thousand Barrels)

| Source | Crude Oil[2] | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Products[3] | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **PAD District III** | | | | | | | | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Algeria | 3,059 | 1,080 | 0 | 0 | 0 | 0 | 0 | 0 | 99 | 0 | 1,472 | 2,651 | 5,710 | 184 |
| Iraq | 11,042 | 0 | 123 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 123 | 11,165 | 360 |
| Saudi Arabia | 21,521 | 0 | 2,897 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,897 | 24,418 | 788 |
| United Arab Emirates | 0 | 482 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 482 | 482 | 16 |
| Subtotal Arab OPEC | 35,622 | 1,561 | 3,020 | 0 | 0 | 0 | 0 | 0 | 99 | 0 | 1,472 | 6,152 | 41,774 | 1,348 |
| **Other OPEC** | | | | | | | | | | | | | | |
| Ecuador | 739 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 739 | 24 |
| Indonesia | 1,741 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,741 | 56 |
| Nigeria | 5,855 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5,855 | 189 |
| Venezuela | 9,216 | 289 | 1,145 | 237 | 0 | 0 | 0 | 0 | 0 | 0 | 253 | 1,924 | 11,140 | 359 |
| Subtotal Other OPEC | 17,551 | 289 | 1,145 | 237 | 0 | 0 | 0 | 0 | 0 | 0 | 253 | 1,924 | 19,475 | 628 |
| **Other** | | | | | | | | | | | | | | |
| Angola | 3,326 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,326 | 107 |
| Argentina | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 0 | 17 | 17 | 1 |
| Australia | 854 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 854 | 28 |
| Belgium | 0 | 0 | 245 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 245 | 245 | 8 |
| Bermuda | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | (s) |
| Brazil | 0 | 0 | 0 | 28 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 | 28 | 1 |
| Canada | 0 | 0 | 288 | 0 | 0 | 0 | 0 | 0 | 0 | 129 | 271 | 688 | 688 | 22 |
| China, People's Republic of | 2,269 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,269 | 73 |
| Colombia | 3,140 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,140 | 101 |
| France | 0 | 0 | 341 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 341 | 341 | 11 |
| Guatemala | 219 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 219 | 7 |
| India | 0 | 0 | 493 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 323 | 816 | 816 | 26 |
| Japan | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 0 | 18 | 18 | 1 |
| Mexico | 16,391 | 695 | 0 | 0 | 0 | 234 | 0 | 0 | 199 | 0 | 10 | 1,138 | 17,529 | 565 |
| Netherlands Antilles | 0 | 0 | 105 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 105 | 105 | 3 |
| Netherlands | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 19 | 19 | 1 |
| Norway | 1,770 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,770 | 57 |
| Panama | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | (s) |
| Puerto Rico | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 12 | 12 | (s) |
| Spain | 0 | 0 | 193 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 193 | 193 | 6 |
| Trinidad and Tobago | 1,416 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,416 | 46 |
| Turkey | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 53 | 53 | 53 | 2 |
| United Kingdom | 6,898 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6,898 | 223 |
| U.S.S.R. | 0 | 0 | 373 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 373 | 373 | 12 |
| Virgin Islands | 0 | 0 | 0 | 0 | 0 | 0 | 330 | 0 | 0 | 0 | 0 | 330 | 330 | 11 |
| Yemen (Sanaa) | 599 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 599 | 19 |
| Zaire | 525 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 525 | 17 |
| Subtotal Other | 37,407 | 696 | 2,039 | 28 | 0 | 234 | 330 | 0 | 199 | 164 | 688 | 4,378 | 41,785 | 1,348 |
| **Total Imports** | **90,580** | **2,547** | **6,204** | **265** | **0** | **234** | **330** | **0** | **298** | **164** | **2,413** | **12,454** | **103,034** | **3,324** |

See footnotes at end of table.

## Table 18. Imports of Crude Oil and Petroleum Products by Source and PAD District,[1] October 1988 (continued)
(Thousand Barrels)

| Source | Crude Oil [2] | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Products [3] | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PAD District IV** | | | | | | | | | | | | | | |
| **Other** | | | | | | | | | | | | | | |
| Canada | 1,480 | 306 | 0 | 0 | 37 | 0 | 0 | 117 | 0 | 0 | 63 | 523 | 2,003 | 65 |
| Subtotal Other | 1,480 | 306 | 0 | 0 | 37 | 0 | 0 | 117 | 0 | 0 | 63 | 523 | 2,003 | 65 |
| **Total Imports** | **1,480** | **306** | **0** | **0** | **37** | **0** | **0** | **117** | **0** | **0** | **63** | **523** | **2,003** | **65** |
| **PAD District V** | | | | | | | | | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Kuwait | 0 | 0 | 0 | 0 | 0 | 45 | 0 | 0 | 0 | 0 | 0 | 45 | 45 | 1 |
| Saudi Arabia | 0 | 0 | 0 | 0 | 616 | 220 | 0 | 0 | 0 | 0 | 0 | 836 | 836 | 27 |
| Subtotal Arab OPEC | 0 | 0 | 0 | 0 | 616 | 265 | 0 | 0 | 0 | 0 | 0 | 881 | 881 | 28 |
| **Other OPEC** | | | | | | | | | | | | | | |
| Indonesia | 4,457 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 503 | 0 | 0 | 503 | 4,960 | 160 |
| Subtotal Other OPEC | 4,457 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 503 | 0 | 0 | 503 | 4,960 | 160 |
| **Other** | | | | | | | | | | | | | | |
| Canada | 90 | 404 | 0 | 0 | 54 | 6 | 0 | 47 | 0 | 7 | 23 | 541 | 631 | 20 |
| France | 0 | 0 | 0 | 0 | 120 | 0 | 0 | 0 | 0 | 0 | 0 | 120 | 120 | 4 |
| Malaysia | 601 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 601 | 19 |
| Mexico | 0 | 0 | 0 | 0 | 101 | 91 | 0 | 0 | 0 | 0 | 2 | 194 | 194 | 6 |
| Netherlands | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | (s) |
| Singapore | 0 | 0 | 0 | 0 | 0 | 281 | 0 | 0 | 233 | 0 | 0 | 514 | 514 | 17 |
| South Africa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | (s) |
| Thailand | 450 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 450 | 15 |
| Subtotal Other | 1,141 | 406 | 0 | 0 | 275 | 379 | 0 | 47 | 233 | 7 | 26 | 1,373 | 2,514 | 81 |
| **Total Imports** | **5,598** | **406** | **0** | **0** | **891** | **644** | **0** | **47** | **736** | **7** | **26** | **2,757** | **8,355** | **270** |

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[1] Crude Oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

[2] Includes crude oil imported for storage in the Strategic Petroleum Reserve.

[3] Includes aviation gasoline, aviation gasoline blending components, waxes, asphalt, lubricants, pentanes plus, naphthas less than 400 degrees F endpoint, other oils equal to or greater than 400 degrees F endpoint, petroleum coke and miscellaneous products.

[4] Beginning in January 1988, imports of crude oil and petroleum products from the Neutral Zone are shown separately. Prior to January 1988, these data were included with imports from Saudi Arabia and Kuwait.

(s) = Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 19. Year-to-Date Imports of Crude Oil and Petroleum Products by Source and PAD District,[1] January - October 1988
(Thousand Barrels)

| Source | Crude Oil [2] | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Products [3] | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | **All PAD Districts** | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Algeria | 36,757 | 7,062 | 8,422 | 0 | 0 | 314 | 0 | 4,140 | 17,112 | 0 | 14,487 | 51,537 | 88,294 | 289 |
| Iraq | 102,331 | 0 | 930 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 930 | 103,261 | 339 |
| Kuwait | 19,968 | 790 | 2,637 | 0 | 0 | 45 | 0 | 0 | 0 | 0 | 0 | 3,472 | 23,440 | 77 |
| Neutral Zone[4] | 3,274 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,274 | 11 |
| Saudi Arabia | 266,243 | 7,221 | 29,391 | 335 | 7,415 | 2,940 | 325 | 4,480 | 0 | 0 | 660 | 52,767 | 319,010 | 1,046 |
| United Arab Emirates | 7,433 | 482 | 573 | 0 | 0 | 592 | 0 | 342 | 0 | 0 | 213 | 2,202 | 9,635 | 32 |
| Subtotal Arab OPEC | 436,006 | 15,554 | 41,953 | 335 | 7,415 | 3,891 | 325 | 8,962 | 17,112 | 0 | 15,360 | 110,908 | 546,914 | 1,793 |
| **Other OPEC** | | | | | | | | | | | | | | |
| Ecuador | 8,982 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,186 | 0 | 0 | 4,186 | 13,168 | 43 |
| Gabon | 4,990 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 323 | 0 | 0 | 323 | 5,313 | 17 |
| Indonesia | 53,371 | 0 | 1,176 | 0 | 0 | 0 | 0 | 0 | 2,078 | 0 | 524 | 3,778 | 57,149 | 187 |
| Iran | [5] 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | [5] 25 | [5] (s) |
| Nigeria | 169,275 | 0 | 603 | 0 | 0 | 0 | 0 | 256 | 2,898 | 0 | 0 | 3,757 | 173,032 | 567 |
| Venezuela | 139,945 | 1,896 | 16,143 | 1,342 | 14,666 | 8,033 | 0 | 25,942 | 27,594 | 3 | 6,317 | 101,936 | 241,881 | 793 |
| Subtotal Other OPEC | 376,588 | 1,896 | 17,922 | 1,342 | 14,666 | 8,033 | 0 | 26,198 | 37,079 | 3 | 6,841 | 113,980 | 490,568 | 1,608 |
| **Other** | | | | | | | | | | | | | | |
| Angola | 60,447 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,189 | 0 | 0 | 2,189 | 62,636 | 205 |
| Argentina | 967 | 0 | 0 | 18 | 415 | 0 | 0 | 0 | 1,170 | 314 | 17 | 1,934 | 2,901 | 10 |
| Australia | 14,515 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 868 | 0 | 131 | 999 | 15,514 | 51 |
| Bahama Islands | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 8,160 | 0 | 0 | 8,168 | 8,168 | 27 |
| Bahrain | 0 | 0 | 275 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 275 | 275 | 1 |
| Belgium | 0 | 0 | 3,418 | 482 | 1,368 | 0 | 0 | 0 | 1,304 | 0 | 15 | 6,587 | 6,587 | 22 |
| Benin | 1,326 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,326 | 4 |
| Bermuda | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 8 | (s) |
| Brazil | 0 | 548 | 15 | 51 | 23,269 | 0 | 219 | 1,281 | 5,222 | 70 | 67 | 30,742 | 30,742 | 101 |
| Brunei | 338 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 338 | 1 |
| Cameroon | 9,557 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,234 | 0 | 0 | 2,234 | 11,791 | 39 |
| Canada | 205,614 | 36,118 | 2,147 | 36 | 14,274 | 2,993 | 229 | 19,616 | 11,137 | 1,175 | 3,916 | 91,641 | 297,255 | 975 |
| China, People's Republic of | 26,227 | 1 | 0 | 307 | 1,162 | 0 | 0 | 0 | 0 | 0 | 260 | 1,730 | 27,957 | 92 |
| China, Taiwan | 0 | 45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 58 | 103 | 103 | (s) |
| Colombia | 30,010 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7,985 | 0 | 0 | 7,985 | 37,995 | 125 |
| Congo | 10,747 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 933 | 0 | 0 | 933 | 11,680 | 38 |
| Egypt | 7,368 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 8 | 7,376 | 24 |
| Finland | 0 | 0 | 0 | 0 | 292 | 0 | 0 | 0 | 0 | 0 | 0 | 292 | 292 | 1 |
| France | 0 | 36 | 341 | 105 | 2,239 | 0 | 0 | 0 | 1,416 | 0 | 177 | 4,314 | 4,314 | 14 |
| Germany DR (E) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 944 | 0 | 0 | 0 | 944 | 944 | 3 |
| Germany FD (W) | 0 | 13 | 359 | 0 | 310 | 0 | 0 | 0 | 1,079 | 26 | 54 | 1,841 | 1,841 | 6 |
| Ghana | 0 | 0 | 151 | 0 | 0 | 0 | 0 | 0 | 298 | 0 | 0 | 449 | 449 | 1 |
| Greece | 0 | 0 | 239 | 0 | 2,187 | 251 | 0 | 134 | 2,267 | 0 | 0 | 5,078 | 5,078 | 17 |
| Guatemala | 859 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 859 | 3 |
| Hong Kong | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | (s) | (s) |
| Hungary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 5 | (s) |
| India | 100 | 0 | 5,591 | 0 | 0 | 0 | 0 | 0 | 0 | 1,548 | 1,148 | 8,287 | 8,387 | 27 |
| Ireland | 0 | 0 | 174 | 0 | 0 | 0 | 0 | 0 | 203 | 0 | 0 | 377 | 377 | 1 |
| Israel | 0 | 0 | 0 | 0 | 1,084 | 0 | 0 | 0 | 0 | 36 | 0 | 1,120 | 1,120 | 4 |
| Italy | 1,883 | 1 | 5,399 | 33 | 8,418 | 587 | 0 | 981 | 1,451 | 98 | 110 | 17,077 | 18,960 | 62 |
| Japan | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 57 | 0 | 44 | 409 | 530 | 530 | 2 |

See footnotes at end of table.

## Table 19. Year-to-Date Imports of Crude Oil and Petroleum Products by Source and PAD District,[1] January - October 1988 (continued)
(Thousand Barrels)

| Source | Crude Oil [2] | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Products [3] | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | All PAD Districts (continued) | | | | | | | |
| **Other (continued)** | | | | | | | | | | | | | | |
| Korea, Republic of | 0 | 10 | 0 | 0 | 0 | 258 | 0 | 0 | 0 | 0 | 147 | 415 | 415 | 1 |
| Liberia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 210 | 0 | 0 | 0 | 210 | 210 | 1 |
| Malaysia | 2,565 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,565 | 8 |
| Mauritania | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 245 | 0 | 0 | 245 | 245 | 1 |
| Mexico | 203,863 | 7,631 | 0 | 440 | 1,001 | 3,938 | 0 | 1,447 | 4,211 | 0 | 2,237 | 20,905 | 224,768 | 737 |
| Netherlands Antilles | 0 | 0 | 105 | 0 | 981 | 0 | 0 | 892 | 5,958 | 0 | 143 | 8,079 | 8,079 | 26 |
| Netherlands | 0 | 14 | 1,539 | 66 | 10,040 | 0 | 151 | 1,182 | 1,841 | 146 | 345 | 15,324 | 15,324 | 50 |
| Norway | 18,601 | 0 | 488 | 0 | 0 | 0 | 0 | 0 | 273 | 0 | 569 | 1,330 | 19,931 | 65 |
| Oman | 2,439 | 0 | 986 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 986 | 3,425 | 11 |
| Panama | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 11 | 11 | (s) |
| Peru | 1,509 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7,727 | 0 | 0 | 7,727 | 9,236 | 30 |
| Philippines | 0 | 74 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 74 | 74 | (s) |
| Portugal | 0 | 0 | 0 | 22 | 221 | 0 | 0 | 0 | 411 | 28 | 45 | 727 | 727 | 2 |
| Puerto Rico | 0 | 0 | 1,189 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5,171 | 6,360 | 6,360 | 21 |
| Romania | 0 | 0 | 0 | 10,467 | 4,325 | 0 | 0 | 1,283 | 1,140 | 0 | 0 | 17,215 | 17,215 | 56 |
| Singapore | 0 | 0 | 601 | 13 | 0 | 950 | 0 | 0 | 2,458 | 0 | 0 | 4,022 | 4,022 | 13 |
| South Africa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 210 | 0 | 103 | 313 | 313 | 1 |
| Spain | 0 | 40 | 3,022 | 142 | 8,753 | 1,771 | 0 | 219 | 2,696 | 0 | 1,753 | 18,396 | 18,396 | 60 |
| Sweden | 0 | 2 | 146 | 0 | 257 | 0 | 0 | 372 | 1,475 | 0 | 250 | 2,502 | 2,502 | 8 |
| Switzerland | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | (s) |
| Syria | 2,045 | 0 | 538 | 0 | 0 | 0 | 0 | 0 | 194 | 0 | 0 | 732 | 2,777 | 9 |
| Thailand | 1,431 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,431 | 5 |
| Trinidad and Tobago | 21,588 | 0 | 0 | 0 | 397 | 633 | 115 | 712 | 6,049 | 0 | 3 | 7,909 | 29,497 | 97 |
| Tunisia | 0 | 0 | 220 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 220 | 220 | 1 |
| Turkey | 0 | 0 | 1,878 | 0 | 0 | 0 | 0 | 0 | 230 | 34 | 237 | 2,379 | 2,379 | 8 |
| United Kingdom | 82,184 | 10 | 1,537 | 0 | 6,553 | 244 | 0 | 1,238 | 5,238 | 68 | 206 | 15,094 | 97,278 | 319 |
| U.S.S.R. | 0 | 0 | 1,660 | 0 | 395 | 0 | 0 | 3,751 | 744 | 8 | 0 | 6,558 | 6,558 | 22 |
| Virgin Islands | 0 | 0 | 15,624 | 3,474 | 8,556 | 3,822 | 3,027 | 11,769 | 21,681 | 0 | 0 | 67,953 | 67,953 | 223 |
| Yemen (Sanaa) | 6,616 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6,616 | 22 |
| Zaire | 8,715 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8,715 | 29 |
| Subtotal Other | 721,514 | 44,563 | 47,650 | 15,656 | 96,497 | 15,447 | 3,741 | 46,096 | 110,707 | 3,595 | 17,586 | 401,538 | 1,123,052 | 3,682 |
| **Total Imports** | **1,534,108** | **62,014** | **107,525** | **17,333** | **118,578** | **27,371** | **4,066** | **81,256** | **164,898** | **3,598** | **39,787** | **626,425** | **2,160,533** | **7,084** |
| | | | | | | | PAD District I | | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Algeria | 0 | 3,094 | 7,356 | 0 | 0 | 314 | 0 | 4,140 | 14,930 | 0 | 0 | 29,833 | 29,833 | 98 |
| Iraq | 7,509 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7,509 | 25 |
| Neutral Zone[4] | 650 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 650 | 2 |
| Saudi Arabia | 34,143 | 2,239 | 355 | 335 | 5,673 | 2,161 | 325 | 4,480 | 0 | 0 | 0 | 15,569 | 49,712 | 163 |
| United Arab Emirates | 1,427 | 0 | 0 | 0 | 0 | 0 | 0 | 342 | 0 | 0 | 0 | 342 | 1,769 | 6 |
| Subtotal Arab OPEC | 43,729 | 5,333 | 7,711 | 335 | 5,673 | 2,475 | 325 | 8,962 | 14,930 | 0 | 0 | 45,744 | 89,473 | 293 |
| **Other OPEC** | | | | | | | | | | | | | | |
| Ecuador | 5,661 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,186 | 0 | 0 | 4,186 | 9,847 | 32 |
| Gabon | 2,551 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 323 | 0 | 0 | 323 | 2,874 | 9 |
| Indonesia | 1,964 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,575 | 0 | 0 | 1,575 | 3,539 | 12 |
| Nigeria | 94,305 | 0 | 0 | 0 | 0 | 0 | 0 | 256 | 2,898 | 0 | 0 | 3,154 | 97,459 | 320 |

See footnotes at end of table.

**Table 19. Year-to-Date Imports of Crude Oil and Petroleum Products by Source and PAD District,[1] January - October 1988** (continued)
(Thousand Barrels)

| Source | Crude Oil [2] | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Products [3] | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PAD District I (continued)** | | | | | | | | | | | | | | |
| **Other OPEC** | | | | | | | | | | | | | | |
| Venezuela | 37,912 | 817 | 3,460 | 397 | 12,599 | 6,035 | 0 | 25,940 | 27,074 | 3 | 5,699 | 82,024 | 119,936 | 393 |
| Subtotal Other OPEC | 142,393 | 817 | 3,460 | 397 | 12,599 | 6,035 | 0 | 26,196 | 36,056 | 3 | 5,699 | 91,262 | 233,655 | 766 |
| **Other** | | | | | | | | | | | | | | |
| Angola | 30,235 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,189 | 0 | 0 | 2,189 | 32,424 | 106 |
| Argentina | 967 | 0 | 0 | 18 | 415 | 0 | 0 | 0 | 1,170 | 35 | 0 | 1,638 | 2,605 | 9 |
| Australia | 1,298 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 182 | 0 | 80 | 262 | 1,560 | 5 |
| Bahama Islands | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 7,933 | 0 | 0 | 7,941 | 7,941 | 26 |
| Belgium | 0 | 0 | 1,360 | 274 | 1,368 | 0 | 0 | 0 | 1,304 | 0 | 0 | 4,306 | 4,306 | 14 |
| Benin | 1,013 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,013 | 3 |
| Brazil | 0 | 0 | 15 | 0 | 21,500 | 0 | 219 | 1,281 | 5,222 | 17 | 60 | 28,314 | 28,314 | 93 |
| Cameroon | 6,131 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,234 | 0 | 0 | 2,234 | 8,365 | 27 |
| Canada | 20,146 | 3,995 | 585 | 15 | 11,280 | 1,760 | 229 | 15,919 | 9,064 | 99 | 1,798 | 44,743 | 64,889 | 213 |
| China, People's Republic of | 9,975 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 114 | 114 | 10,089 | 33 |
| China, Taiwan | 0 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 30 | (s) |
| Colombia | 6,895 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7,985 | 0 | 0 | 7,985 | 14,880 | 49 |
| Congo | 2,353 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 933 | 0 | 0 | 933 | 3,286 | 11 |
| Egypt | 5,741 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 | 5,745 | 19 |
| Finland | 0 | 0 | 0 | 0 | 292 | 0 | 0 | 0 | 0 | 0 | 0 | 292 | 292 | 1 |
| France | 0 | 2 | 0 | 105 | 1,987 | 0 | 0 | 0 | 1,416 | 0 | 54 | 3,564 | 3,564 | 12 |
| Germany DR (E) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 944 | 0 | 0 | 0 | 944 | 944 | 3 |
| Germany FD (W) | 0 | 12 | 0 | 0 | 310 | 0 | 0 | 0 | 827 | 22 | 20 | 1,191 | 1,191 | 4 |
| Ghana | 0 | 0 | 133 | 0 | 0 | 0 | 0 | 0 | 298 | 0 | 0 | 431 | 431 | 1 |
| Greece | 0 | 0 | 0 | 0 | 2,187 | 251 | 0 | 134 | 2,267 | 0 | 0 | 4,839 | 4,839 | 16 |
| Hungary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 5 | (s) |
| India | 0 | 0 | 569 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 569 | 569 | 2 |
| Ireland | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 203 | 0 | 0 | 203 | 203 | 1 |
| Israel | 0 | 0 | 0 | 0 | 1,084 | 0 | 0 | 0 | 0 | 0 | 0 | 1,084 | 1,084 | 4 |
| Italy | 1,532 | 1 | 3,031 | 33 | 8,418 | 37 | 0 | 981 | 1,451 | 18 | 20 | 13,990 | 15,522 | 51 |
| Japan | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 77 | 86 | 86 | (s) |
| Korea, Republic of | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 6 | (s) |
| Liberia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 210 | 0 | 0 | 0 | 210 | 210 | 1 |
| Mauritania | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 245 | 0 | 0 | 245 | 245 | 1 |
| Mexico | 23,586 | 0 | 0 | 0 | 309 | 1,035 | 0 | 1,347 | 2,307 | 0 | 1,836 | 6,834 | 30,420 | 100 |
| Netherlands Antilles | 0 | 0 | 0 | 0 | 464 | 0 | 0 | 892 | 5,958 | 0 | 84 | 7,398 | 7,398 | 24 |
| Netherlands | 0 | 6 | 1,381 | 66 | 9,332 | 0 | 151 | 1,182 | 1,841 | 131 | 45 | 14,135 | 14,135 | 46 |
| Norway | 11,044 | 0 | 213 | 0 | 0 | 0 | 0 | 0 | 273 | 0 | 569 | 1,055 | 12,099 | 40 |
| Oman | 839 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 839 | 3 |
| Panama | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 10 | 10 | (s) |
| Peru | 380 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7,727 | 0 | 0 | 7,727 | 8,107 | 27 |
| Portugal | 0 | 0 | 0 | 0 | 221 | 0 | 0 | 0 | 411 | 0 | 0 | 632 | 632 | 2 |
| Puerto Rico | 0 | 0 | 1,086 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,408 | 5,494 | 5,494 | 18 |
| Romania | 0 | 0 | 0 | 10,467 | 4,325 | 0 | 0 | 1,283 | 1,140 | 0 | 0 | 17,215 | 17,215 | 56 |
| Singapore | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 402 | 0 | 0 | 402 | 402 | 1 |
| South Africa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 210 | 0 | 54 | 264 | 264 | 1 |
| Spain | 0 | 2 | 1,002 | 142 | 8,752 | 1,433 | 0 | 219 | 2,695 | 0 | 1,634 | 15,879 | 15,879 | 52 |
| Sweden | 0 | 1 | 146 | 0 | 257 | 0 | 0 | 372 | 1,475 | 0 | 0 | 2,251 | 2,251 | 7 |
| Switzerland | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | (s) |

See footnotes at end of table.

## Table 19. Year-to-Date Imports of Crude Oil and Petroleum Products by Source and PAD District,[1] January - October 1988 (continued)
(Thousand Barrels)

| Source | Crude Oil [2] | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Products [3] | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **PAD District I (continued)** | | | | | | | | | | | | | |
| **Other (continued)** | | | | | | | | | | | | | | |
| Syria | 2,045 | 0 | 538 | 0 | 0 | 0 | 0 | 0 | 194 | 0 | 0 | 732 | 2,777 | 9 |
| Trinidad and Tobago | 4,898 | 0 | 0 | 0 | 397 | 300 | 115 | 712 | 6,049 | 0 | 3 | 7,576 | 12,474 | 41 |
| Turkey | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 230 | 0 | 0 | 230 | 230 | 1 |
| United Kingdom | 35,666 | 4 | 4 | 0 | 6,553 | 244 | 0 | 1,238 | 4,623 | 68 | 77 | 12,811 | 48,477 | 159 |
| U.S.S.R. | 0 | 0 | 0 | 0 | 395 | 0 | 0 | 3,751 | 27 | 8 | 0 | 4,181 | 4,181 | 14 |
| Virgin Islands | 0 | 0 | 15,208 | 3,474 | 8,556 | 3,593 | 1,754 | 11,769 | 21,681 | 0 | 0 | 66,035 | 66,035 | 217 |
| Yemen (Sanaa) | 2,713 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,713 | 9 |
| Zaire | 4,500 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,500 | 15 |
| Subtotal Other | 171,957 | 4,058 | 25,271 | 14,594 | 88,402 | 8,653 | 2,468 | 42,242 | 102,176 | 406 | 10,944 | 299,214 | 471,171 | 1,545 |
| **Total Imports** | **358,079** | **10,208** | **36,442** | **15,326** | **106,674** | **17,163** | **2,793** | **77,400** | **153,162** | **409** | **16,643** | **436,220** | **794,299** | **2,604** |
| | **PAD District II** | | | | | | | | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Algeria | 4,408 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,408 | 14 |
| Iraq | 10,062 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10,062 | 33 |
| Kuwait | 656 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 656 | 2 |
| Saudi Arabia | 43,071 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 43,071 | 141 |
| United Arab Emirates | 177 | 0 | 0 | 0 | 0 | 592 | 0 | 0 | 0 | 0 | 0 | 592 | 769 | 3 |
| Subtotal Arab OPEC | 58,374 | 0 | 0 | 0 | 0 | 592 | 0 | 0 | 0 | 0 | 0 | 592 | 58,966 | 193 |
| **Other OPEC** | | | | | | | | | | | | | | |
| Ecuador | 1,170 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,170 | 4 |
| Indonesia | 659 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 659 | 2 |
| Nigeria | 25,968 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25,968 | 85 |
| Venezuela | 1,813 | 0 | 634 | 0 | 0 | 1,273 | 0 | 0 | 0 | 0 | 0 | 1,907 | 3,720 | 12 |
| Subtotal Other OPEC | 29,610 | 0 | 634 | 0 | 0 | 1,273 | 0 | 0 | 0 | 0 | 0 | 1,907 | 31,517 | 103 |
| **Other** | | | | | | | | | | | | | | |
| Cameroon | 417 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 417 | 1 |
| Canada | 158,971 | 25,989 | 0 | 21 | 1,135 | 857 | 0 | 1,634 | 1,142 | 511 | 981 | 32,270 | 191,241 | 627 |
| Colombia | 922 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 922 | 3 |
| Congo | 480 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 480 | 2 |
| Egypt | 935 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 935 | 3 |
| France | 0 | 34 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 34 | 34 | (s) |
| Italy | 0 | 0 | 0 | 0 | 0 | 132 | 0 | 0 | 0 | 0 | 0 | 132 | 132 | (s) |
| Japan | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | (s) | (s) |
| Mexico | 16,588 | 0 | 0 | 0 | 0 | 1,613 | 0 | 0 | 0 | 0 | 0 | 1,613 | 18,201 | 60 |
| Norway | 447 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 447 | 1 |
| Peru | 1,129 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,129 | 4 |
| Puerto Rico | 0 | 0 | 103 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 103 | 103 | (s) |
| South Africa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 41 | 41 | 41 | (s) |
| Spain | 0 | 0 | 0 | 0 | 0 | 251 | 0 | 0 | 0 | 0 | 119 | 370 | 370 | 1 |
| Sweden | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | (s) |
| Trinidad and Tobago | 176 | 0 | 0 | 0 | 0 | 333 | 0 | 0 | 0 | 0 | 0 | 333 | 509 | 2 |
| United Kingdom | 7,612 | 6 | 368 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 374 | 7,986 | 26 |
| Yemen (Sanaa) | 2,102 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,102 | 7 |

See footnotes at end of table.

### Table 19. Year-to-Date Imports of Crude Oil and Petroleum Products by Source and PAD District,[1] January - October 1988 (continued)
(Thousand Barrels)

| Source | Crude Oil [2] | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Products [3] | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **PAD District II (continued)** | | | | | | | | | | | | | |
| **Other (continued)** | | | | | | | | | | | | | | |
| Zaire | 646 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 646 | 2 |
| Subtotal Other | 190,425 | 26,031 | 471 | 21 | 1,135 | 3,186 | 0 | 1,634 | 1,142 | 511 | 1,141 | 35,272 | 225,697 | 740 |
| **Total Imports** | **278,409** | **26,031** | **1,105** | **21** | **1,135** | **5,051** | **0** | **1,634** | **1,142** | **511** | **1,141** | **37,771** | **316,180** | **1,037** |
| | **PAD District III** | | | | | | | | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Algeria | 32,349 | 3,968 | 1,066 | 0 | 0 | 0 | 0 | 0 | 2,182 | 0 | 14,487 | 21,703 | 54,052 | 177 |
| Iraq | 84,760 | 0 | 930 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 930 | 85,690 | 281 |
| Kuwait | 19,312 | 790 | 2,637 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,427 | 22,739 | 75 |
| Neutral Zone[4] | 2,624 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,624 | 9 |
| Saudi Arabia | 189,029 | 4,981 | 29,036 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 660 | 34,677 | 223,706 | 733 |
| United Arab Emirates | 5,379 | 482 | 573 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 213 | 1,268 | 6,647 | 22 |
| Subtotal Arab OPEC | 333,453 | 10,222 | 34,242 | 0 | 0 | 0 | 0 | 0 | 2,182 | 0 | 15,360 | 62,006 | 395,459 | 1,297 |
| **Other OPEC** | | | | | | | | | | | | | | |
| Ecuador | 2,151 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,151 | 7 |
| Gabon | 2,439 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,439 | 8 |
| Indonesia | 17,844 | 0 | 922 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 922 | 18,766 | 62 |
| Iran | [5] 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | [5] 25 | [5] (s) |
| Nigeria | 49,002 | 0 | 603 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 603 | 49,605 | 163 |
| Venezuela | 100,220 | 1,080 | 12,049 | 945 | 1,811 | 0 | 0 | 2 | 520 | 0 | 407 | 16,814 | 117 034 | 384 |
| Subtotal Other OPEC | 171,681 | 1,080 | 13,574 | 945 | 1,811 | 0 | 0 | 2 | 520 | 0 | 407 | 18,339 | 190,020 | 623 |
| **Other** | | | | | | | | | | | | | | |
| Angola | 30,212 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30,212 | 99 |
| Argentina | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 279 | 17 | 296 | 296 | 1 |
| Australia | 7,092 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 51 | 51 | 7,143 | 23 |
| Bahama Islands | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 227 | 0 | 0 | 227 | 227 | 1 |
| Bahrain | 0 | 0 | 275 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 275 | 275 | 1 |
| Belgium | 0 | 0 | 2,058 | 208 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 2,281 | 2,281 | 7 |
| Benin | 313 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 313 | 1 |
| Bermuda | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 8 | (s) |
| Brazil | 0 | 548 | 0 | 51 | 747 | 0 | 0 | 0 | 0 | 53 | 7 | 1,406 | 1,406 | 5 |
| Cameroon | 3,009 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,009 | 10 |
| Canada | 3,510 | 1 | 1,562 | 0 | 0 | 0 | 0 | 600 | 701 | 478 | 522 | 3,864 | 7,374 | 24 |
| China, People's Republic of | 14,120 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 146 | 146 | 14,266 | 47 |
| Colombia | 22,193 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22,193 | 73 |
| Congo | 7,914 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7,914 | 26 |
| Egypt | 692 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 | 696 | 2 |
| France | 0 | 0 | 341 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 123 | 464 | 464 | 2 |
| Germany FD (W) | 0 | 1 | 359 | 0 | 0 | 0 | 0 | 0 | 252 | 4 | 34 | 650 | 650 | 2 |
| Ghana | 0 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 18 | (s) |
| Greece | 0 | 0 | 239 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 239 | 239 | 1 |
| Guatemala | 859 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 859 | 3 |
| India | 100 | 0 | 5,022 | 0 | 0 | 0 | 0 | 0 | 0 | 1,548 | 1,148 | 7,718 | 7,818 | 26 |

See footnotes at end of table

### Table 19. Year-to-Date Imports of Crude Oil and Petroleum Products by Source and PAD District,[1] January - October 1988 (continued)
(Thousand Barrels)

| Source | Crude Oil [2] | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Products [3] | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **PAD District III (continued)** | | | | | | | | | | | | | |
| **Other (continued)** | | | | | | | | | | | | | | |
| Ireland | 0 | 0 | 174 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 174 | 174 | 1 |
| Israel | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 36 | 0 | 36 | 36 | (s) |
| Italy | 351 | 0 | 2,368 | 0 | 0 | 0 | 0 | 0 | 0 | 80 | 90 | 2,538 | 2,889 | 9 |
| Japan | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 36 | 160 | 196 | 196 | 1 |
| Malaysia | 424 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 424 | 1 |
| Mexico | 163,689 | 7,631 | 0 | 440 | 202 | 909 | 0 | 0 | 1,900 | 0 | 150 | 11,232 | 174,921 | 574 |
| Netherlands Antilles | 0 | 0 | 105 | 0 | 248 | 0 | 0 | 0 | 0 | 0 | 59 | 412 | 412 | 1 |
| Netherlands | 0 | 0 | 158 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 300 | 473 | 473 | 2 |
| Norway | 7,110 | 0 | 275 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 275 | 7,385 | 24 |
| Oman | 1,600 | 0 | 986 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 986 | 2,586 | 8 |
| Panama | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | (s) |
| Portugal | 0 | 0 | 0 | 22 | 0 | 0 | 0 | 0 | 0 | 28 | 45 | 95 | 95 | (s) |
| Puerto Rico | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 763 | 763 | 763 | 3 |
| South Africa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 | 4 | (s) |
| Spain | 0 | 38 | 2,020 | 0 | 1 | 86 | 0 | 0 | 1 | 0 | 0 | 2,147 | 2,147 | 7 |
| Sweden | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 250 | 250 | 250 | 1 |
| Trinidad and Tobago | 16,514 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16,514 | 54 |
| Tunisia | 0 | 0 | 220 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 220 | 220 | 1 |
| Turkey | 0 | 0 | 1,878 | 0 | 0 | 0 | 0 | 0 | 0 | 34 | 237 | 2,149 | 2,149 | 7 |
| United Kingdom | 38,906 | 0 | 1,165 | 0 | 0 | 0 | 0 | 0 | 615 | 0 | 129 | 1,909 | 40,815 | 134 |
| U.S.S.R. | 0 | 0 | 1,660 | 0 | 0 | 0 | 0 | 0 | 717 | 0 | 0 | 2,377 | 2,377 | 8 |
| Virgin Islands | 0 | 0 | 416 | 0 | 0 | 229 | 1,273 | 0 | 0 | 0 | 0 | 1,918 | 1,918 | 6 |
| Yemen (Sanaa) | 1,801 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,801 | 6 |
| Zaire | 3,569 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,569 | 12 |
| Subtotal Other | 323,978 | 8,220 | 21,307 | 721 | 1,198 | 1,225 | 1,273 | 600 | 4,413 | 2,591 | 4,254 | 45,801 | 369,779 | 1,212 |
| **Total Imports** | **829,112** | **19,521** | **69,123** | **1,666** | **3,009** | **1,225** | **1,273** | **602** | **7,115** | **2,591** | **20,021** | **126,146** | **955,258** | **3,132** |
| | **PAD District IV** | | | | | | | | | | | | | |
| **Other** | | | | | | | | | | | | | | |
| Canada | 18,627 | 3,553 | 0 | 0 | 496 | 0 | 0 | 722 | 2 | 1 | 297 | 5,071 | 23,698 | 78 |
| China, People's Republic of | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | (s) |
| Subtotal Other | 18,627 | 3,553 | 0 | 0 | 496 | 0 | 0 | 722 | 2 | 1 | 297 | 5,071 | 23,698 | 78 |
| **Total Imports** | **18,627** | **3,553** | **0** | **0** | **496** | **0** | **0** | **722** | **2** | **1** | **297** | **5,071** | **23,698** | **78** |
| | **PAD District V** | | | | | | | | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Kuwait | 0 | 0 | 0 | 0 | 0 | 45 | 0 | 0 | 0 | 0 | 0 | 45 | 45 | (s) |
| Saudi Arabia | 0 | 0 | 0 | 0 | 1,742 | 779 | 0 | 0 | 0 | 0 | 0 | 2,521 | 2,521 | 8 |
| United Arab Emirates | 450 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 450 | 1 |
| Subtotal Arab OPEC | 450 | 0 | 0 | 0 | 1,742 | 824 | 0 | 0 | 0 | 0 | 0 | 2,566 | 3,016 | 10 |

See footnotes at end of table.

## Table 19. Year-to-Date Imports of Crude Oil and Petroleum Products by Source and PAD District,[1] January - October 1988 (continued)

(Thousand Barrels)

| Source | Crude Oil [2] | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Products [3] | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | PAD District V (continued) | | | | | | | | |
| **Other OPEC** | | | | | | | | | | | | | | |
| Indonesia | 32,904 | 0 | 254 | 0 | 0 | 0 | 0 | 0 | 503 | 0 | 524 | 1,281 | 34,185 | 112 |
| Venezuela | 0 | 0 | 0 | 0 | 256 | 725 | 0 | 0 | 0 | 0 | 211 | 1,192 | 1,192 | 4 |
| Subtotal Other OPEC | 32,904 | 0 | 254 | 0 | 256 | 725 | 0 | 0 | 503 | 0 | 735 | 2,473 | 35,377 | 116 |
| **Other** | | | | | | | | | | | | | | |
| Australia | 6,125 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 686 | 0 | 0 | 686 | 6,811 | 22 |
| Brazil | 0 | 0 | 0 | 0 | 1,022 | 0 | 0 | 0 | 0 | 0 | 0 | 1,022 | 1,022 | 3 |
| Brunei | 338 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 338 | 1 |
| Canada | 4,360 | 2,581 | 0 | 0 | 1,363 | 376 | 0 | 741 | 228 | 86 | 318 | 5,693 | 10,053 | 33 |
| China, People's Republic of | 2,132 | 0 | 0 | 307 | 1,162 | 0 | 0 | 0 | 0 | 0 | 0 | 1,469 | 3,601 | 12 |
| China, Taiwan | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 58 | 74 | 74 | (s) |
| France | 0 | 0 | 0 | 0 | 252 | 0 | 0 | 0 | 0 | 0 | 0 | 252 | 252 | 1 |
| Hong Kong | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | (s) | (s) |
| Italy | 0 | 0 | 0 | 0 | 0 | 418 | 0 | 0 | 0 | 0 | 0 | 418 | 418 | 1 |
| Japan | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 57 | 0 | 0 | 172 | 248 | 248 | 1 |
| Korea, Republic of | 0 | 4 | 0 | 0 | 0 | 258 | 0 | 0 | 0 | 0 | 147 | 409 | 409 | 1 |
| Malaysia | 2,141 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,141 | 7 |
| Mexico | 0 | 0 | 0 | 0 | 490 | 380 | 0 | 100 | 4 | 0 | 251 | 1 225 | 1,225 | 4 |
| Netherlands Antilles | 0 | 0 | 0 | 0 | 269 | 0 | 0 | 0 | 0 | 0 | 0 | 269 | 269 | 1 |
| Netherlands | 0 | 8 | 0 | 0 | 708 | 0 | 0 | 0 | 0 | 0 | 0 | 716 | 716 | 2 |
| Philippines | 0 | 74 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 74 | 74 | (s) |
| Singapore | 0 | 0 | 601 | 13 | 0 | 950 | 0 | 0 | 2,056 | 0 | 0 | 3,620 | 3,620 | 12 |
| South Africa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 | 4 | (s) |
| Switzerland | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | (s) | (s) |
| Thailand | 1,431 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 431 | 5 |
| Subtotal Other | 16,527 | 2,701 | 601 | 320 | 5,266 | 2,383 | 0 | 898 | 2,974 | 86 | 950 | 16 179 | 32 706 | 107 |
| **Total Imports** | **49,881** | **2,701** | **855** | **320** | **7,264** | **3,932** | **0** | **898** | **3,477** | **86** | **1,685** | **21,218** | **71,099** | **233** |

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[1] Crude Oil and unfinished oils are reported by the PAD District in which they are to be processed, all other products are reported by the PAD District of entry

[2] Includes crude oil imported for storage in the Strategic Petroleum Reserve

[3] Includes aviation gasoline, aviation gasoline blending components, waxes, asphalt, lubricants, pentanes plus, naphthas less than 400 degrees F endpoint, other oils equal to or greater than 400 degrees F endpoint, petroleum coke and miscellaneous products

[4] Beginning in January 1988, imports of crude oil and petroleum products from the Neutral Zone are shown separately Prior to January 1988, these data were included with imports from Saudi Arabia and Kuwait

[5] A small amount of Iranian crude oil entered the United States (defined in this publication as the 50 States and the District of Columbia) in January 1988 from the Virgin Islands This oil originated in Iran and was exported to the Virgin Islands prior to the signing of Executive Order 12613 on Oct 29, 1987

(s) = Less than 500 barrels.

Note. Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2

## Table 20. Exports of Crude Oil and Petroleum Products by PAD District, October 1988
(Thousand Barrels)

| Commodity | Petroleum Administration for Defense Districts | | | | | | Daily Average |
|---|---|---|---|---|---|---|---|
| | I | II | III | IV | V | Total | |
| Crude Oil (including lease condensate) 1 | 0 | 93 | 0 | 0 | 5,203 | 5,296 | 171 |
| Natural Gas Liquids | 38 | 419 | 1,014 | 45 | 276 | 1,792 | 58 |
| Pentanes Plus | 0 | 51 | 0 | 0 | 0 | 51 | 2 |
| Liquefied Petroleum Gases | 38 | 368 | 1,014 | 45 | 276 | 1,741 | 56 |
| Ethane | (s) | 102 | (s) | 0 | (s) | 102 | 3 |
| Propane | 17 | 117 | 1,014 | 18 | 122 | 1,288 | 42 |
| Normal Butane | 21 | 97 | 1 | 27 | 154 | 300 | 10 |
| Isobutane | 0 | 51 | 0 | 0 | 0 | 51 | 2 |
| Finished Motor Gasoline | 27 | 10 | 347 | 0 | 27 | 410 | 13 |
| Naphtha-Type Jet Fuel | (s) | 0 | 0 | (s) | 77 | 77 | 2 |
| Kerosene-Type Jet Fuel | 4 | 1 | 27 | 0 | 22 | 54 | 2 |
| Kerosene | 7 | 57 | 0 | 0 | 1 | 65 | 2 |
| Distillate Fuel Oil | 44 | 59 | 546 | 0 | 840 | 1,489 | 48 |
| Residual Fuel Oil | 130 | 0 | 951 | 0 | 4,524 | 5,605 | 181 |
| Naphtha < 400 Deg. for Petro. Feed. Use | 60 | 23 | 56 | (s) | 10 | 149 | 5 |
| Other Oils > 400 Deg. for Petro. Feed. Use | (s) | 21 | 243 | 0 | 74 | 339 | 11 |
| Special Naphthas | 9 | 5 | 84 | (s) | 6 | 104 | 3 |
| Lubricants | 182 | 32 | 217 | 4 | 96 | 532 | 17 |
| Waxes | 4 | 1 | 26 | 0 | 7 | 39 | 1 |
| Petroleum Coke | 87 | 30 | 3,598 | 0 | 3,133 | 6,848 | 221 |
| Asphalt | (s) | 1 | 2 | 1 | 1 | 5 | (s) |
| Miscellaneous Products | 23 | 2 | 7 | (s) | 5 | 37 | 1 |
| Total Product Exports | 616 | 661 | 7,118 | 51 | 9,100 | 17,546 | 566 |
| **Total Exports** | **616** | **754** | **7,118** | **51** | **14,303** | **22,842** | **737** |

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[1] Crude oil exports are restricted to: 1) crude oil derived from fields under the State waters of Alaska's Cook Inlet; 2) certain domestically produced crude oil destined for Canada; and 3) shipments to U.S. territories.

(s) = Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 21. Year-to-Date Exports of Crude Oil and Petroleum Products by PAD District, January - October 1988
(Thousand Barrels)

| Commodity | Petroleum Administration for Defense Districts | | | | | | Daily Average |
|---|---|---|---|---|---|---|---|
| | I | II | III | IV | V | Total | |
| Crude Oil (including lease condensate) [1] | 0 | 3,267 | 0 | 0 | 46,173 | 49,440 | 162 |
| Natural Gas Liquids | 693 | 5,064 | 5,473 | 352 | 2,105 | 13,687 | 45 |
| Pentanes Plus | 0 | 606 | 0 | 0 | 0 | 606 | 2 |
| Liquefied Petroleum Gases | 693 | 4,457 | 5,473 | 352 | 2,105 | 13,081 | 43 |
| Ethane | 6 | 1,214 | 2 | 0 | (s) | 1,223 | 4 |
| Propane | 296 | 1,356 | 5,203 | 141 | 929 | 7,925 | 26 |
| Normal Butane | 390 | 1,281 | 268 | 211 | 1,176 | 3,326 | 11 |
| Isobutane | 0 | 606 | 0 | 0 | 0 | 606 | 2 |
| Finished Motor Gasoline | 204 | 660 | 4,404 | 1 | 962 | 6,230 | 20 |
| Naphtha-Type Jet Fuel | 9 | 0 | 245 | 1 | 157 | 413 | 1 |
| Kerosene-Type Jet Fuel | 273 | 4 | 4,860 | (s) | 1,825 | 6,963 | 23 |
| Kerosene | 86 | 185 | 43 | 1 | 3 | 317 | 1 |
| Distillate Fuel Oil | 326 | 421 | 10,387 | 1 | 10,239 | 21,374 | 70 |
| Residual Fuel Oil | 159 | 0 | 17,845 | 0 | 42,340 | 60,344 | 198 |
| Naphtha < 400 Deg. for Petro. Feed. Use | 519 | 249 | 574 | 9 | 166 | 1,517 | 5 |
| Other Oils > 400 Deg. for Petro. Feed. Use | 17 | 327 | 3,028 | 0 | 1,632 | 5,003 | 16 |
| Special Naphthas | 291 | 162 | 815 | 2 | 589 | 1,859 | 6 |
| Lubricants | 2,044 | 416 | 3,570 | 36 | 1,422 | 7,489 | 25 |
| Waxes | 57 | 107 | 269 | (s) | 79 | 512 | 2 |
| Petroleum Coke | 1,902 | 1,390 | 39,838 | 2 | 27,787 | 70,918 | 233 |
| Asphalt | 9 | 170 | 11 | 8 | 54 | 252 | 1 |
| Miscellaneous Products | 306 | 24 | 162 | 1 | 52 | 545 | 2 |
| Total Product Exports | 6,895 | 9,178 | 91,524 | 413 | 89,413 | 197,423 | 647 |
| **Total Exports** | **6,895** | **12,445** | **91,524** | **413** | **135,586** | **246,863** | **809** |

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[1] Crude oil exports are restricted to: 1) crude oil derived from fields under the State waters of Alaska's Cook Inlet; 2) certain domestically produced crude oil destined for Canada; and 3) shipments to U.S. territories.

(s) = Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 22. Exports of Crude Oil and Petroleum Products by Destination, October 1988
(Thousand Barrels)

| Destination | Crude Oil 1 | LPG | Finished Motor Gasoline | Jet Fuel | Dist. Fuel Oil | Residual Fuel Oil | Special Naphthas | Lubricants | Waxes | Petroleum Coke | Asphalt | Other2 | Total | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Argentina | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | (s) | 2 | 0 | 0 | 12 | (s) |
| Australia | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 7 | 1 | 190 | 0 | 3 | 202 | 7 |
| Bahama Islands | 0 | 0 | 31 | 12 | 85 | 150 | (s) | 4 | 0 | 0 | 0 | (s) | 282 | 9 |
| Bahrain | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 65 | 0 | (s) | 65 | 2 |
| Belgium & Luxembourg | 0 | 3 | 0 | 0 | 0 | 0 | 8 | 13 | (s) | 800 | 0 | 2 | 826 | 27 |
| Brazil | 0 | (s) | 1 | 0 | 0 | 0 | 0 | (s) | (s) | 64 | 0 | (s) | 65 | 2 |
| Cameroon | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 75 | 0 | 0 | 75 | 2 |
| Canada | 93 | 454 | 59 | 24 | 595 | 237 | 8 | 76 | 4 | 80 | 2 | 171 | 1,804 | 58 |
| Chile | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 12 | 0 | 0 | 0 | 1 | 13 | (s) |
| China, Taiwan | 0 | 14 | 0 | 0 | 0 | 2,368 | 0 | 41 | (s) | 81 | (s) | 9 | 2,513 | 81 |
| Colombia | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 1 | (s) | (s) | 0 | (s) | 2 | (s) |
| Costa Rica | 0 | 1 | 0 | 0 | (s) | 0 | 5 | 8 | (s) | (s) | 0 | 8 | 22 | 1 |
| Denmark | 0 | 0 | 0 | 0 | 0 | 0 | (s) | (s) | (s) | 115 | 0 | (s) | 116 | 4 |
| Dominican Republic | 0 | 18 | 0 | 0 | 0 | 0 | (s) | 4 | (s) | 0 | 0 | (s) | 23 | 1 |
| Ecuador | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | (s) | 0 | (s) | 1 | 25 | 1 |
| Egypt | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 0 | 0 | 0 | (s) | (s) |
| El Salvador | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | (s) | 3 | (s) |
| Finland | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 2 | (s) |
| France | 0 | 25 | 0 | 0 | 0 | 0 | (s) | 2 | 12 | 55 | 0 | 47 | 141 | 5 |
| French Pacific Isl | 0 | 0 | 0 | 0 | 0 | 414 | 0 | 1 | 0 | 0 | 0 | 0 | 415 | 13 |
| Germany FD (W) | 0 | 2 | 0 | 0 | 0 | 0 | (s) | 7 | 1 | 86 | (s) | 4 | 101 | 3 |
| Ghana | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 44 | 0 | 0 | 45 | 1 |
| Greece | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 335 | 0 | (s) | 335 | 11 |
| Guatemala | 0 | 62 | 0 | 0 | 0 | 0 | 1 | 18 | 0 | 0 | 0 | 7 | 88 | 3 |
| Guinea | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | (s) |
| Honduras | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 1 | 3 | (s) |
| Hong Kong | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | (s) | 0 | 0 | 1 | 2 | (s) |
| India | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | (s) | 0 | 0 | 6 | 7 | (s) |
| Iran | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Israel | 0 | 1 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 0 | 0 | 1 | 2 | (s) |
| Italy | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 767 | (s) | 198 | 967 | 31 |
| Ivory Coast | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | (s) | (s) |
| Jamaica | 0 | (s) | 0 | 0 | 0 | 200 | (s) | 1 | 0 | 0 | 0 | (s) | 202 | 7 |
| Japan | 0 | 18 | 0 | 77 | 285 | 375 | 48 | 20 | 2 | 2,012 | 0 | 105 | 2,942 | 95 |
| Jordan | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 0 | 0 | 0 | (s) | (s) |
| Korea, Republic of | 0 | 12 | 0 | 0 | 1 | 0 | 4 | 5 | (s) | 317 | 0 | 3 | 342 | 11 |
| Kuwait | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 1 | 0 | 0 | 0 | 1 | 3 | (s) |
| Lebanon | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 0 | 0 | 0 | (s) | (s) |
| Liberia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Malaysia | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 2 | (s) | 0 | 0 | (s) | 5 | (s) |
| Mexico | 0 | 1,025 | 115 | 0 | (s) | 1,405 | 9 | 86 | 12 | 66 | 0 | 9 | 2,728 | 88 |
| Netherlands | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 9 | (s) | 421 | (s) | (s) | 431 | 14 |
| Netherlands Antilles | 0 | 0 | 0 | 0 | (s) | 219 | 0 | 1 | 0 | 0 | 0 | (s) | 221 | 7 |
| New Zealand | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | (s) | (s) | 0 | 1 | 1 | (s) |
| Nigeria | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 0 | 0 | 0 | (s) | (s) |
| Norway | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 88 | 0 | (s) | 88 | 3 |
| Pacific Trust Terr. | 0 | (s) | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 0 | 0 | 0 | 1 | (s) |
| Panama | 0 | (s) | 46 | 0 | 0 | 96 | 0 | 3 | 0 | 0 | 0 | 4 | 149 | 5 |
| Peru | 0 | (s) | 0 | 0 | 0 | 0 | (s) | 26 | (s) | (s) | 0 | 4 | 30 | 1 |
| Philippines | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 2 | (s) | 0 | 0 | 2 | 3 | (s) |
| Puerto Rico | 448 | 7 | 118 | 15 | 0 | 3 | 4 | 28 | 2 | 0 | 0 | 12 | 635 | 20 |
| South Africa | 0 | 45 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 26 | (s) | 0 | 72 | 2 |
| Saudi Arabia | 0 | 14 | 0 | 0 | (s) | 0 | 0 | 5 | (s) | 0 | 0 | 4 | 23 | 1 |

See footnotes at end of table.

## Table 22. Exports of Crude Oil and Petroleum Products by Destination, October 1988 (continued)
(Thousand Barrels)

| Destination | Crude Oil [1] | LPG | Finished Motor Gasoline | Jet Fuel | Dist. Fuel Oil | Residual Fuel Oil | Special Naphthas | Lubricants | Waxes | Petroleum Coke | Asphalt | Other[2] | Total | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Singapore | 0 | 1 | 0 | 0 | 0 | 0 | 6 | 4 | (s) | 28 | (s) | 9 | 48 | 2 |
| Spain | 0 | 0 | 0 | 0 | 327 | 0 | 0 | 1 | 0 | 648 | 0 | 1 | 978 | 32 |
| Surinam | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 6 | 0 | (s) | 7 | (s) |
| Sweden | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | (s) | 0 | 0 | (s) | 2 | (s) |
| Switzerland | 0 | (s) | 0 | 0 | (s) | 0 | 0 | 2 | (s) | 0 | 0 | (s) | 4 | (s) |
| Thailand | 0 | (s) | 0 | 0 | 0 | 0 | 2 | 1 | 0 | (s) | 0 | 1 | 4 | (s) |
| Trinidad and Tobago | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | (s) | (s) |
| Turkey | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | (s) |
| United Arab Emirates | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 58 | 0 | 0 | 59 | 2 |
| United Kingdom | 0 | 1 | 21 | 0 | (s) | 0 | (s) | 3 | 1 | 171 | (s) | 11 | 210 | 7 |
| U.S.S.R. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 56 | 0 | 72 | 0 | 0 | 128 | 4 |
| Uruguay | 0 | 0 | 16 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | (s) | 17 | 1 |
| Venezuela | 0 | (s) | 0 | 0 | 0 | 0 | (s) | 15 | (s) | 177 | 0 | 3 | 195 | 6 |
| Virgin Islands | 4,755 | 0 | 0 | (s) | 0 | 125 | 0 | 1 | 0 | 0 | 0 | 1 | 4,882 | 157 |
| Yugoslavia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 0 | 0 | 0 | (s) | (s) |
| Other | 0 | 33 | 4 | 3 | 194 | 14 | 0 | 8 | 1 | 0 | 1 | 8 | 266 | 9 |
| **Total** | **5,296** | **1,741** | **410** | **131** | **1,489** | **5,605** | **104** | **532** | **39** | **6,848** | **5** | **641** | **22,842** | **737** |

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[1] Crude oil exports are restricted to 1) crude oil derived from fields under the State waters of Alaska's Cook Inlet, 2) certain domestically produced crude oil destined for Canada, and 3) shipments to U.S. territories.

[2] Includes pentanes plus, kerosene, naphtha less than 400 degrees F endpoint, other oils equal to or greater than 400 degrees F endpoint and miscellaneous products.

(s) —Less than 500 barrels

Note Total may not equal sum of components due to independent rounding

Sources and estimation procedures See Explanatory Notes 1 and 2

## Table 23. Year-to-Date Exports of Crude Oil and Petroleum Products by Destination, January - October 1988

(Thousand Barrels)

| Destination | Crude Oil [1] | LPG | Finished Motor Gasoline | Jet Fuel | Dist. Fuel Oil | Residual Fuel Oil | Special Naphthas | Lubricants | Waxes | Petroleum Coke | Asphalt | Other[2] | Total | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Argentina | 0 | 41 | 0 | 0 | 220 | 256 | 9 | 56 | 1 | 6 | (s) | 118 | 706 | 2 |
| Australia | 0 | 17 | 0 | 0 | 229 | 2,033 | 57 | 91 | 5 | 2,359 | 1 | 45 | 4,838 | 16 |
| Bahama Islands | 0 | 112 | 534 | 296 | 1,900 | 3,706 | (s) | 35 | (s) | 0 | (s) | 1 | 6,585 | 22 |
| Bahrain | 0 | 1 | 0 | 0 | (s) | 0 | (s) | (s) | 0 | 381 | 0 | 2 | 384 | 1 |
| Belgium & Luxembourg | 0 | 24 | (s) | 0 | 0 | 0 | 85 | 208 | 10 | 6,770 | (s) | 10 | 7,108 | 23 |
| Brazil | 0 | 52 | 44 | 0 | 263 | 0 | 25 | 142 | (s) | 367 | (s) | 6 | 899 | 3 |
| Cameroon | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 188 | 0 | 0 | 188 | 1 |
| Canada | 3,277 | 5,347 | 1,207 | 2,128 | 3,181 | 2,968 | 220 | 1,259 | 132 | 3,470 | 218 | 1,601 | 25,007 | 82 |
| Chile | 0 | 3 | 0 | 0 | 211 | 0 | 10 | 180 | 3 | (s) | (s) | 9 | 417 | 1 |
| China, Taiwan | 951 | 37 | 1 | 0 | 786 | 12,011 | 3 | 446 | 28 | 255 | 1 | 84 | 14,603 | 48 |
| Colombia | 0 | (s) | 126 | 0 | 0 | 0 | 8 | 60 | (s) | 2 | (s) | 16 | 213 | 1 |
| Costa Rica | 0 | 1 | 21 | 0 | (s) | 0 | 26 | 94 | (s) | 20 | (s) | 37 | 200 | 1 |
| Denmark | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 3 | (s) | 771 | 1 | 10 | 788 | 3 |
| Dominican Republic | 0 | 65 | 4 | 0 | 57 | 0 | 3 | 29 | 1 | (s) | 0 | 7 | 167 | 1 |
| Ecuador | 0 | (s) | 52 | 10 | (s) | 0 | 3 | 125 | 1 | 0 | (s) | 9 | 201 | 1 |
| Egypt | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | (s) | 268 | (s) | 1 | 277 | 1 |
| El Salvador | 0 | 17 | 97 | 0 | 78 | 0 | 3 | 31 | (s) | (s) | 0 | 35 | 261 | 1 |
| Finland | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 174 | (s) | 1 | 187 | 1 |
| France | 0 | 29 | (s) | 0 | 0 | 107 | 1 | 29 | 59 | 2,507 | (s) | 809 | 3,540 | 12 |
| French Pacific Isl | 0 | 1 | 0 | 0 | 392 | 1,357 | (s) | 4 | 0 | 0 | 0 | 0 | 1,754 | 6 |
| Germany FD (W) | 0 | 21 | 2 | 0 | (s) | 0 | 16 | 165 | 30 | 626 | 9 | 85 | 954 | 3 |
| Ghana | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 2 | 0 | 322 | (s) | 1 | 326 | 1 |
| Greece | 0 | 6 | 0 | 0 | 0 | 0 | 2 | 8 | (s) | 1,470 | 0 | (s) | 1,487 | 5 |
| Guatemala | 0 | 790 | 790 | 71 | 1,275 | 0 | 12 | 102 | (s) | (s) | (s) | 19 | 3,060 | 10 |
| Guinea | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | (s) | 7 | (s) |
| Honduras | 0 | 60 | 25 | 20 | 70 | 45 | 6 | 29 | 3 | 0 | 0 | 12 | 269 | 1 |
| Hong Kong | 0 | 6 | 0 | 0 | 0 | 0 | 1 | 28 | 1 | (s) | (s) | 5 | 41 | (s) |
| India | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 112 | 1 | (s) | (s) | 43 | 161 | 1 |
| Indonesia | 0 | 1 | 0 | 0 | 0 | 0 | 4 | 28 | (s) | 194 | (s) | 1 | 228 | 1 |
| Iran | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Israel | 0 | 2 | 39 | 448 | 0 | 0 | 11 | 24 | (s) | 282 | 0 | 8 | 814 | 3 |
| Italy | 0 | 112 | 3 | 0 | 0 | 0 | 26 | 38 | 6 | 8,665 | (s) | 873 | 9,723 | 32 |
| Ivory Coast | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | (s) | 0 | (s) | (s) | 25 | (s) |
| Jamaica | 0 | 184 | 168 | 0 | 455 | 2,049 | 2 | 48 | 1 | (s) | 0 | 8 | 2,915 | 10 |
| Japan | 0 | 53 | 2,102 | 3,344 | 6,304 | 5,352 | 801 | 485 | 30 | 18,509 | (s) | 690 | 37,670 | 124 |
| Jordan | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | (s) | 10 | (s) |
| Korea, Republic of | 0 | 123 | 3 | 0 | 243 | 3,076 | 50 | 291 | 4 | 1,198 | (s) | 833 | 5,820 | 19 |
| Kuwait | 0 | 1 | 0 | 0 | 0 | 0 | (s) | 12 | 0 | 0 | 0 | 3 | 16 | (s) |
| Lebanon | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 7 | (s) | 121 | 0 | (s) | 128 | (s) |
| Liberia | 0 | 0 | 0 | 0 | 0 | 21 | 0 | 1 | 0 | 0 | (s) | (s) | 21 | (s) |
| Malaysia | 0 | (s) | 0 | 0 | 0 | 0 | 3 | 16 | 4 | 11 | (s) | 53 | 87 | (s) |
| Mexico | 0 | 5,202 | 139 | 18 | 1 | 12,130 | 55 | 908 | 135 | 747 | 1 | 140 | 19,476 | 64 |
| Netherlands | 0 | 44 | 19 | 0 | 0 | 0 | 211 | 95 | 6 | 7,439 | 1 | 359 | 8,174 | 27 |
| Netherlands Antilles | 0 | (s) | 9 | 2 | 79 | 5,054 | 1 | 16 | 0 | 0 | 0 | 4 | 5,165 | 17 |
| New Zealand | 0 | (s) | 0 | 0 | 0 | 0 | 9 | 12 | 1 | 396 | 1 | 12 | 432 | 1 |
| Nigeria | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 94 | 1 | 0 | (s) | (s) | 95 | (s) |
| Norway | 0 | 6 | 0 | 0 | (s) | 0 | (s) | 5 | (s) | 1,041 | (s) | 2 | 1,054 | 3 |
| Pacific Trust Terr. | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | (s) | 8 | (s) |
| Panama | 0 | 20 | 409 | 0 | 1,028 | 1,179 | 9 | 259 | (s) | 0 | (s) | 18 | 2,923 | 10 |
| Peru | 0 | 22 | 45 | 900 | 2,611 | 0 | 1 | 103 | (s) | 1 | (s) | 8 | 3,690 | 12 |
| Philippines | 0 | 30 | 0 | 0 | 0 | 0 | 9 | 43 | 3 | 27 | (s) | 127 | 238 | 1 |
| Puerto Rico | 4,930 | 92 | 138 | 119 | 308 | 95 | 15 | 334 | 13 | 11 | (s) | 134 | 6,187 | 20 |
| South Africa | 0 | 47 | 0 | 0 | (s) | 0 | (s) | 8 | 1 | 362 | (s) | 15 | 433 | 1 |

See footnotes at end of table.

## Table 23. Year-to-Date Exports of Crude Oil and Petroleum Products by Destination, January - October 1988 (continued)

(Thousand Barrels)

| Destination | Crude Oil [1] | LPG | Finished Motor Gasoline | Jet Fuel | Dist. Fuel Oil | Residual Fuel Oil | Special Naphthas | Lubricants | Waxes | Petroleum Coke | Asphalt | Other[2] | Total | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Saudi Arabia | 0 | 110 | 0 | 0 | (s) | 0 | 2 | 65 | (s) | 3 | (s) | 31 | 210 | 1 |
| Singapore | 0 | 6 | 0 | 0 | 326 | 4,513 | 17 | 49 | (s) | 58 | (s) | 164 | 5,134 | 17 |
| Spain | 0 | (s) | 0 | 0 | 529 | 3,103 | (s) | 37 | 19 | 6,253 | (s) | 575 | 10,517 | 34 |
| Surinam | 0 | 53 | 0 | 0 | 0 | 0 | (s) | 9 | 0 | 14 | 0 | 1 | 76 | (s) |
| Sweden | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 13 | 1 | 307 | 1 | 4 | 327 | 1 |
| Switzerland | 0 | 1 | 0 | 0 | (s) | 0 | 1 | 13 | (s) | 0 | (s) | 3 | 19 | (s) |
| Thailand | 0 | 2 | 0 | 0 | 0 | 0 | 7 | 30 | 1 | (s) | (s) | 301 | 342 | 1 |
| Trinidad and Tobago | 0 | 7 | 0 | 0 | 80 | 0 | 108 | 2 | (s) | (s) | 0 | 4 | 200 | 1 |
| Turkey | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 36 | (s) | 1,174 | 0 | 2 | 1,212 | 4 |
| United Arab Emirates | 0 | (s) | 0 | 0 | 0 | 5 | (s) | 66 | 0 | 247 | (s) | 9 | 327 | 1 |
| United Kingdom | 0 | 84 | 75 | 0 | 4 | 204 | 2 | 58 | 5 | 1,486 | 7 | 408 | 2,334 | 8 |
| U.S.S.R. | 0 | 0 | 0 | 0 | 0 | 25 | 0 | 734 | 0 | 359 | 1 | 59 | 1,178 | 4 |
| Uruguay | 0 | (s) | 16 | 0 | 0 | 182 | 0 | 8 | (s) | 0 | 0 | 1 | 207 | 1 |
| Venezuela | 0 | 14 | 0 | 5 | (s) | 0 | 13 | 41 | 2 | 907 | (s) | 29 | 1,011 | 3 |
| Virgin Islands | 40,281 | 4 | 7 | (s) | 0 | 125 | 0 | 19 | 0 | 0 | 0 | 10 | 40,445 | 133 |
| Yugoslavia | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 1 | 0 | 269 | 1 | 2 | 272 | 1 |
| Other | 0 | 220 | 157 | 16 | 740 | 749 | 7 | 181 | 2 | 880 | 3 | 134 | 3,088 | 10 |
| **Total** | **49,440** | **13,081** | **6,230** | **7,375** | **21,374** | **60,344** | **1,859** | **7,489** | **512** | **70,918** | **252** | **7,988** | **246,863** | **809** |

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[1] Crude oil exports are restricted to: 1) crude oil derived from fields under the State waters of Alaska's Cook Inlet; 2) certain domestically produced crude oil destined for Canada. and 3) shipments to U S territories.

[2] Includes pentanes plus, kerosene, naphtha less than 400 degrees F endpoint, other oils equal to or greater than 400 degrees F endpoint and miscellaneous products.

(s) = Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 24. Stocks of Crude Oil and Petroleum Products by PAD District, October 31, 1988
(Thousand Barrels)

| Commodity | PAD District I | | | PAD District II | | | | PAD District III | | | | | | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | East Coast | Appala-chian No.1 | Total | Ind., Ill., Ky. * | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast | |
| **Crude Oil (incl. lease condensate)** | | | | | | | | | | | | | | | | |
| Refinery | -- | -- | 15,509 | -- | -- | -- | 11,737 | -- | -- | -- | -- | -- | 48,767 | 1,643 | 25,520 | 103,176 |
| Tank Farms and Pipelines | -- | -- | 1,253 | -- | -- | -- | 55,662 | -- | -- | -- | -- | -- | 92,782 | 9,002 | 31,887 | 190,586 |
| Leases | -- | -- | 39 | -- | -- | -- | 1,599 | -- | -- | -- | -- | -- | 16,722 | 1,214 | 1,744 | 21,318 |
| Strategic Petroleum Reserve[1] | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | -- | -- | 556,001 | 0 | 0 | 556,001 |
| Alaskan In-Transit | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | -- | -- | 0 | 0 | 24,527 | 24,527 |
| Total | -- | -- | 16,801 | -- | -- | -- | 68,998 | -- | -- | -- | -- | -- | 714,272 | 11,859 | 83,678 | 895,608 |
| **Total Stocks, All Oils (excl. Crude Oil)** | | | | | | | | | | | | | | | | |
| Refinery | 41,280 | 3,115 | 44,395 | 37,627 | 6,324 | 15,339 | 59,290 | 10,837 | 78,958 | 48,270 | 5,007 | 1,055 | 144,127 | 10,542 | 66,933 | 325,287 |
| Bulk Terminal | -- | -- | 103,230 | -- | -- | -- | 71,738 | -- | -- | -- | -- | -- | 77,909 | 2,790 | 26,747 | 282,414 |
| Pipeline | -- | -- | 28,353 | -- | -- | -- | 35,400 | -- | -- | -- | -- | -- | 39,490 | 2,420 | 5,345 | 111,008 |
| Natural Gas Processing Plant | 147 | 45 | 192 | 287 | 69 | 2,837 | 3,193 | 1,296 | 8,126 | 2,395 | 132 | 110 | 12,059 | 207 | 174 | 15,825 |
| Total | -- | -- | 176,170 | -- | -- | -- | 169,621 | -- | -- | -- | -- | -- | 273,585 | 15,959 | 99,199 | 734,534 |
| **Pentanes Plus** | | | | | | | | | | | | | | | | |
| Refinery | 20 | 0 | 20 | 78 | 38 | 208 | 324 | 312 | 207 | 127 | 8 | 4 | 658 | 0 | 81 | 1,083 |
| Bulk Terminal | -- | -- | 18 | -- | -- | -- | 1,665 | -- | -- | -- | -- | -- | 2,536 | 0 | 29 | 4,248 |
| Pipeline | -- | -- | 0 | -- | -- | -- | 541 | -- | -- | -- | -- | -- | 1,013 | 81 | 0 | 1,635 |
| Natural Gas Processing Plant | 6 | 9 | 15 | 27 | 16 | 479 | 522 | 395 | 784 | 429 | 26 | 14 | 1,648 | 68 | 16 | 2,269 |
| Total | -- | -- | 53 | -- | -- | -- | 3,052 | -- | -- | -- | -- | -- | 5,855 | 149 | 126 | 9,235 |
| **Liquefied Petroleum Gases** | | | | | | | | | | | | | | | | |
| Refinery | 1,550 | 9 | 1,559 | 2,149 | 195 | 624 | 2,968 | 2,488 | 2,614 | 3,189 | 18 | 25 | 8,334 | 467 | 1,242 | 14,570 |
| Bulk Terminal | -- | -- | 2,002 | -- | -- | -- | 22,928 | -- | -- | -- | -- | -- | 48,778 | 131 | 2,978 | 76,817 |
| Pipeline | -- | -- | 1,796 | -- | -- | -- | 6,520 | -- | -- | -- | -- | -- | 6,271 | 431 | 0 | 15,018 |
| Natural Gas Processing Plant | 141 | 36 | 177 | 260 | 53 | 2,358 | 2,671 | 872 | 7,337 | 1,963 | 105 | 96 | 10,373 | 139 | 158 | 13,518 |
| Total | -- | -- | 5,534 | -- | -- | -- | 35,087 | -- | -- | -- | -- | -- | 73,756 | 1,168 | 4,378 | 119,923 |
| **Ethane** | | | | | | | | | | | | | | | | |
| Refinery | 18 | 0 | 18 | 1 | 0 | 0 | 1 | 92 | 258 | 0 | 0 | 0 | 350 | 0 | 0 | 369 |
| Bulk Terminal | -- | -- | 0 | -- | -- | -- | 2,775 | -- | -- | -- | -- | -- | 8,834 | 0 | 0 | 11,609 |
| Pipeline | -- | -- | 0 | -- | -- | -- | 1,346 | -- | -- | -- | -- | -- | 2,426 | 130 | 0 | 3,902 |
| Natural Gas Processing Plant | 0 | 0 | 0 | 17 | 0 | 488 | 505 | 91 | 1,522 | 125 | 8 | 26 | 1,772 | 2 | 0 | 2,279 |
| Total | -- | -- | 18 | -- | -- | -- | 4,627 | -- | -- | -- | -- | -- | 13,382 | 132 | 0 | 18,159 |

See footnotes at end of table.

## Table 24. Stocks of Crude Oil and Petroleum Products by PAD District, October 31, 1988 (continued)
(Thousand Barrels)

| Commodity | PAD District I | | | PAD District II | | | | PAD District III | | | | | | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | East Coast | Appalachian No.1 | Total | Ind., Ill., Ky. * | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast | |
| **Propane** | | | | | | | | | | | | | | | | |
| Refinery | 1,296 | 1 | 1,297 | 1,487 | 31 | 168 | 1,686 | 1,329 | 1,030 | 1,438 | 5 | 4 | 3,806 | 169 | 140 | 7,098 |
| Bulk Terminal | -- | -- | 1,641 | -- | -- | -- | 14,305 | -- | -- | -- | -- | -- | 24,769 | 131 | 708 | 41,554 |
| Pipeline | -- | -- | 1,728 | -- | -- | -- | 3,482 | -- | -- | -- | -- | -- | 2,755 | 163 | 0 | 8,128 |
| Natural Gas Processing Plant | 107 | 28 | 135 | 153 | 42 | 1,033 | 1,228 | 452 | 1,835 | 126 | 47 | 45 | 2,505 | 98 | 142 | 4,108 |
| Total | -- | -- | 4,801 | -- | -- | -- | 20,701 | -- | -- | -- | -- | -- | 33,835 | 561 | 990 | 60,888 |
| **Normal Butane** | | | | | | | | | | | | | | | | |
| Refinery | 164 | 8 | 172 | 488 | 93 | 364 | 945 | 766 | 559 | 1,560 | 3 | 12 | 2,900 | 164 | 869 | 5,050 |
| Bulk Terminal | -- | -- | 359 | -- | -- | -- | 4,668 | -- | -- | -- | -- | -- | 11,362 | 0 | 1,868 | 18,257 |
| Pipeline | -- | -- | 68 | -- | -- | -- | 1,147 | -- | -- | -- | -- | -- | 744 | 89 | 0 | 2,048 |
| Natural Gas Processing Plant | 32 | 4 | 36 | 71 | 11 | 612 | 694 | 278 | 2,654 | 657 | 39 | 17 | 3,645 | 35 | 10 | 4,420 |
| Total | -- | -- | 635 | -- | -- | -- | 7,454 | -- | -- | -- | -- | -- | 18,651 | 288 | 2,747 | 29,775 |
| **Isobutane** | | | | | | | | | | | | | | | | |
| Refinery | 72 | 0 | 72 | 173 | 71 | 92 | 336 | 301 | 767 | 191 | 10 | 9 | 1,278 | 134 | 233 | 2,053 |
| Bulk Terminal | -- | -- | 2 | -- | -- | -- | 1,180 | -- | -- | -- | -- | -- | 3,813 | 0 | 402 | 5,397 |
| Pipeline | -- | -- | 0 | -- | -- | -- | 545 | -- | -- | -- | -- | -- | 346 | 49 | 0 | 940 |
| Natural Gas Processing Plant | 2 | 4 | 6 | 19 | 0 | 225 | 244 | 51 | 1,326 | 1,055 | 11 | 8 | 2,451 | 4 | 6 | 2,711 |
| Total | -- | -- | 80 | -- | -- | -- | 2,305 | -- | -- | -- | -- | -- | 7,888 | 187 | 641 | 11,101 |
| **Other Hydrocarbons and Alcohol** | | | | | | | | | | | | | | | | |
| Refinery | 16 | 0 | 16 | 138 | 5 | 14 | 157 | 0 | 117 | 54 | 0 | 5 | 176 | 41 | 204 | 594 |
| Total | -- | -- | 16 | -- | -- | -- | 157 | -- | -- | -- | -- | -- | 176 | 41 | 204 | 594 |
| **Unfinished Oils** | | | | | | | | | | | | | | | | |
| Refinery | | | | | | | | | | | | | | | | |
| Naphthas and Lighter | 3,831 | 207 | 4,038 | 2,857 | 139 | 994 | 3,990 | 721 | 8,536 | 5,032 | 166 | 25 | 14,480 | 490 | 5,319 | 28,317 |
| Kerosene and Light Gas Oils | 2,087 | 180 | 2,267 | 1,285 | 100 | 324 | 1,709 | 411 | 7,469 | 3,107 | 80 | 3 | 11,070 | 233 | 3,980 | 19,259 |
| Heavy Gas Oils | 4,698 | 251 | 4,949 | 4,866 | 371 | 1,979 | 7,216 | 813 | 8,344 | 6,448 | 375 | 133 | 16,113 | 788 | 13,997 | 43,063 |
| Residuum | 1,072 | 157 | 1,229 | 2,177 | 74 | 1,477 | 3,728 | 445 | 4,365 | 3,785 | 87 | 0 | 8,682 | 342 | 4,331 | 18,312 |
| Total | 11,688 | 795 | 12,483 | 11,185 | 684 | 4,774 | 16,643 | 2,390 | 28,714 | 18,372 | 708 | 161 | 50,345 | 1,853 | 27,627 | 108,951 |

See footnotes at end of table.

## Table 24. Stocks of Crude Oil and Petroleum Products by PAD District, October 31, 1988 (continued)

(Thousand Barrels)

| Commodity | PAD District I | | | PAD District II | | | | PAD District III | | | | | | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | East Coast | Appalachian No.1 | Total | Ind., Ill., Ky. * | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast | |
| **Motor Gasoline Blending Components** | | | | | | | | | | | | | | | | |
| Refinery | 4,293 | 90 | 4,383 | 4,988 | 461 | 1,671 | 7,120 | 1,518 | 7,837 | 5,686 | 119 | 179 | 15,339 | 1,563 | 7,642 | 36,047 |
| Bulk Terminal | -- | -- | 179 | -- | -- | -- | 201 | -- | -- | -- | -- | -- | 695 | 49 | 36 | 1,160 |
| Pipeline | -- | -- | 0 | -- | -- | -- | 53 | -- | -- | -- | -- | -- | 0 | 0 | 50 | 103 |
| Total | -- | -- | 4,562 | -- | -- | -- | 7,374 | -- | -- | -- | -- | -- | 16,034 | 1,612 | 7,728 | 37,310 |
| **Aviation Gasoline Blending Components** | | | | | | | | | | | | | | | | |
| Refinery | 0 | 0 | 0 | 70 | 0 | 37 | 107 | 0 | 53 | 75 | 0 | 0 | 128 | 0 | 38 | 273 |
| Total | -- | -- | 0 | -- | -- | -- | 107 | -- | -- | -- | -- | -- | 128 | 0 | 38 | 273 |
| **Total Finished Motor Gasoline** | | | | | | | | | | | | | | | | |
| Refinery | 7,205 | 427 | 7,632 | 5,692 | 1,031 | 2,497 | 9,220 | 1,697 | 11,317 | 5,424 | 511 | 122 | 19,071 | 1,825 | 7,952 | 45,700 |
| Bulk Terminal | -- | -- | 32,053 | -- | -- | -- | 24,953 | -- | -- | -- | -- | -- | 9,997 | 1,701 | 12,364 | 81,068 |
| Pipeline | -- | -- | 14,288 | -- | -- | -- | 16,876 | -- | -- | -- | -- | -- | 18,132 | 1,169 | 2,770 | 53,235 |
| Total | -- | -- | 53,973 | -- | -- | -- | 51,049 | -- | -- | -- | -- | -- | 47,200 | 4,695 | 23,086 | 180,003 |
| **Finished Leaded Motor Gasoline** | | | | | | | | | | | | | | | | |
| Refinery | 753 | 112 | 865 | 1,065 | 244 | 925 | 2,234 | 460 | 1,452 | 1,147 | 177 | 54 | 3,290 | 774 | 2,235 | 9,398 |
| Bulk Terminal | -- | -- | 5,567 | -- | -- | -- | 6,578 | -- | -- | -- | -- | -- | 2,614 | 567 | 4,085 | 19,411 |
| Pipeline | -- | -- | 2,001 | -- | -- | -- | 3,555 | -- | -- | -- | -- | -- | 3,351 | 399 | 458 | 9,764 |
| Total | -- | -- | 8,433 | -- | -- | -- | 12,367 | -- | -- | -- | -- | -- | 9,255 | 1,740 | 6,778 | 38,573 |
| **Finished Unleaded Motor Gasoline** | | | | | | | | | | | | | | | | |
| Refinery | 6,452 | 315 | 6,767 | 4,627 | 787 | 1,572 | 6,986 | 1,237 | 9,865 | 4,277 | 334 | 68 | 15,781 | 1,051 | 5,717 | 36,302 |
| Bulk Terminal | -- | -- | 26,486 | -- | -- | -- | 18,375 | -- | -- | -- | -- | -- | 7,383 | 1,134 | 8,279 | 61,657 |
| Pipeline | -- | -- | 12,287 | -- | -- | -- | 13,321 | -- | -- | -- | -- | -- | 14,781 | 770 | 2,312 | 43,471 |
| Total | -- | -- | 45,540 | -- | -- | -- | 38,682 | -- | -- | -- | -- | -- | 37,945 | 2,955 | 16,308 | 141,430 |
| **Finished Aviation Gasoline** | | | | | | | | | | | | | | | | |
| Refinery | 118 | 0 | 118 | 79 | 25 | 10 | 114 | 88 | 329 | 127 | 0 | 0 | 544 | 34 | 220 | 1,030 |
| Bulk Terminal | -- | -- | 273 | -- | -- | -- | 258 | -- | -- | -- | -- | -- | 54 | 14 | 215 | 814 |
| Pipeline | -- | -- | 0 | -- | -- | -- | 91 | -- | -- | -- | -- | -- | 12 | 0 | 0 | 103 |
| Total | -- | -- | 391 | -- | -- | -- | 463 | -- | -- | -- | -- | -- | 610 | 48 | 435 | 1,947 |

See footnotes at end of table.

## Table 24. Stocks of Crude Oil and Petroleum Products by PAD District, October 31, 1988 (continued)

(Thousand Barrels)

| Commodity | PAD District I |  |  | PAD District II |  |  |  | PAD District III |  |  |  |  |  | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | East Coast | Appala-chian No.1 | Total | Ind., Ill., Ky. * | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast |  |
| **Naphtha-Type Jet Fuel** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 322 | 0 | 322 | 204 | 6 | 140 | 350 | 186 | 498 | 611 | 104 | 173 | 1,572 | 279 | 876 | 3,399 |
| Bulk Terminal | -- | -- | 593 | -- | -- | -- | 259 | -- | -- | -- | -- | -- | 170 | 0 | 527 | 1,549 |
| Pipeline | -- | -- | 162 | -- | -- | -- | 276 | -- | -- | -- | -- | -- | 429 | 117 | 384 | 1,368 |
| Total | -- | -- | 1,077 | -- | -- | -- | 885 | -- | -- | -- | -- | -- | 2,171 | 396 | 1,787 | 6,316 |
| **Kerosene-Type Jet Fuel** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 2,205 | 13 | 2,218 | 1,097 | 191 | 495 | 1,783 | 401 | 3,494 | 2,542 | 44 | 63 | 6,544 | 395 | 4,216 | 15,156 |
| Bulk Terminal | -- | -- | 3,704 | -- | -- | -- | 3,216 | -- | -- | -- | -- | -- | 2,181 | 156 | 2,089 | 11,346 |
| Pipeline | -- | -- | 4,704 | -- | -- | -- | 3,152 | -- | -- | -- | -- | -- | 5,720 | 170 | 784 | 14,530 |
| Total | -- | -- | 10,626 | -- | -- | -- | 8,151 | -- | -- | -- | -- | -- | 14,445 | 721 | 7,089 | 41,032 |
| **Kerosene** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 211 | 95 | 306 | 464 | 158 | 275 | 897 | 80 | 585 | 352 | 105 | 0 | 1,122 | 59 | 176 | 2,560 |
| Bulk Terminal | -- | -- | 2,613 | -- | -- | -- | 1,114 | -- | -- | -- | -- | -- | 445 | 23 | 50 | 4,245 |
| Pipeline | -- | -- | 252 | -- | -- | -- | 178 | -- | -- | -- | -- | -- | 765 | 0 | 6 | 1,201 |
| Total | -- | -- | 3,171 | -- | -- | -- | 2,189 | -- | -- | -- | -- | -- | 2,332 | 82 | 232 | 8,006 |
| **Distillate Fuel Oils** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 8,151 | 519 | 8,670 | 4,912 | 1,125 | 2,693 | 8,730 | 752 | 9,914 | 4,187 | 1,467 | 114 | 16,434 | 1,435 | 5,681 | 40,950 |
| Bulk Terminal | -- | -- | 40,716 | -- | -- | -- | 12,228 | -- | -- | -- | -- | -- | 5,391 | 656 | 4,714 | 63,705 |
| Pipeline | -- | -- | 7,151 | -- | -- | -- | 7,679 | -- | -- | -- | -- | -- | 6,872 | 452 | 1,133 | 23,287 |
| Natural Gas Processing Plant | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 2 | 0 | 0 | 7 | 0 | 0 | 7 |
| Total | -- | -- | 56,537 | -- | -- | -- | 28,637 | -- | -- | -- | -- | -- | 28,704 | 2,543 | 11,528 | 127,949 |
| **Residual Fuel Oils** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 2,113 | 91 | 2,204 | 1,831 | 249 | 185 | 2,265 | 190 | 3,577 | 2,306 | 129 | 11 | 6,213 | 595 | 5,944 | 17,221 |
| Bulk Terminal | -- | -- | 15,404 | -- | -- | -- | 1,309 | -- | -- | -- | -- | -- | 5,329 | 0 | 3,048 | 25,090 |
| Pipeline | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | -- | -- | 0 | 0 | 94 | 94 |
| Total | -- | -- | 17,608 | -- | -- | -- | 3,574 | -- | -- | -- | -- | -- | 11,542 | 595 | 9,086 | 42,405 |
| **Naphtha < 400 Deg. Petro. Feed. Use** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 351 | 0 | 351 | 359 | 0 | 73 | 432 | 43 | 881 | 297 | 34 | 10 | 1,265 | 19 | 161 | 2,228 |
| Total | 351 | 0 | 351 | 359 | 0 | 73 | 432 | 43 | 881 | 297 | 34 | 10 | 1,265 | 19 | 161 | 2,228 |
| **Other Oils > 400 Deg. Petro. Feed. Use** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 3 | 0 | 3 | 2 | 0 | 0 | 2 | 146 | 940 | 126 | 0 | 0 | 1,212 | 7 | 142 | 1,366 |
| Total | 3 | 0 | 3 | 2 | 0 | 0 | 2 | 146 | 940 | 126 | 0 | 0 | 1,212 | 7 | 142 | 1,366 |

See footnotes at end of table

### Table 24. Stocks of Crude Oil and Petroleum Products by PAD District, October 31, 1988 (continued)
(Thousand Barrels)

| Commodity | PAD District I | | | PAD District II | | | | PAD District III | | | | | | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | East Coast | Appalachian No.1 | Total | Ind., Ill., Ky. * | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast | |
| **Special Naphthas** | | | | | | | | | | | | | | | | |
| Refinery | 439 | 32 | 471 | 190 | 0 | 101 | 291 | 63 | 1,122 | 46 | 178 | 0 | 1,409 | 8 | 112 | 2,291 |
| Bulk Terminal | -- | -- | 515 | -- | -- | -- | 352 | -- | -- | -- | -- | -- | 121 | 0 | 17 | 1,005 |
| Total | -- | -- | 986 | -- | -- | -- | 643 | -- | -- | -- | -- | -- | 1,530 | 8 | 129 | 3,296 |
| **Lubricants** | | | | | | | | | | | | | | | | |
| Refinery | 296 | 778 | 1,074 | 982 | 0 | 342 | 1,324 | 27 | 4,050 | 1,224 | 553 | 0 | 5,854 | 99 | 1,004 | 9,355 |
| Bulk Terminal | -- | -- | 1,657 | -- | -- | -- | 679 | -- | -- | -- | -- | -- | 551 | 1 | 514 | 3,402 |
| Total | -- | -- | 2,731 | -- | -- | -- | 2,003 | -- | -- | -- | -- | -- | 6,405 | 100 | 1,518 | 12,757 |
| **Waxes** | | | | | | | | | | | | | | | | |
| Refinery | 0 | 79 | 79 | 81 | 0 | 42 | 123 | 82 | 210 | 132 | 14 | 0 | 438 | 80 | 99 | 819 |
| Total | -- | -- | 79 | -- | -- | -- | 123 | -- | -- | -- | -- | -- | 438 | 80 | 99 | 819 |
| **Petroleum Coke** | | | | | | | | | | | | | | | | |
| Refinery | 672 | 0 | 672 | 347 | 857 | 160 | 1,364 | 9 | 1,149 | 2,588 | 254 | 0 | 4,000 | 14 | 2,009 | 8,059 |
| Total | 672 | 0 | 672 | 347 | 857 | 160 | 1,364 | 9 | 1,149 | 2,588 | 254 | 0 | 4,000 | 14 | 2,009 | 8,059 |
| **Asphalt and Road Oil** | | | | | | | | | | | | | | | | |
| Refinery | 1,488 | 143 | 1,631 | 2,599 | 1,275 | 985 | 4,859 | 301 | 934 | 626 | 761 | 188 | 2,810 | 1,707 | 1,277 | 12,284 |
| Bulk Terminal | -- | -- | 2,903 | -- | -- | -- | 2,455 | -- | -- | -- | -- | -- | 806 | 58 | 137 | 6,359 |
| Total | -- | -- | 4,534 | -- | -- | -- | 7,314 | -- | -- | -- | -- | -- | 3,616 | 1,765 | 1,414 | 18,643 |
| **Miscellaneous Products** | | | | | | | | | | | | | | | | |
| Refinery | 139 | 44 | 183 | 180 | 24 | 13 | 217 | 64 | 416 | 179 | 0 | 0 | 659 | 62 | 230 | 1,351 |
| Bulk Terminal | -- | -- | 600 | -- | -- | -- | 121 | -- | -- | -- | -- | -- | 855 | 1 | 29 | 1,606 |
| Pipeline | -- | -- | 0 | -- | -- | -- | 34 | -- | -- | -- | -- | -- | 276 | 0 | 124 | 434 |
| Natural Gas Processing Plant | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 29 | 0 | 1 | 1 | 0 | 31 | 0 | 0 | 31 |
| Total | -- | -- | 783 | -- | -- | -- | 372 | -- | -- | -- | -- | -- | 1,821 | 63 | 383 | 3,422 |
| **Total Stocks, All Oils** | -- | -- | **192,971** | -- | -- | -- | **238,619** | -- | -- | -- | -- | -- | **987,857** | **27,818** | **182,877** | **1,630,142** |

[1] Includes 38,395 thousand barrels of domestic crude oil.

* Effective January 1987 "Appalachian No.2" is combined with "Ind., Ill., Ky.".

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 25. Refinery and Bulk Terminal Stocks of Selected Petroleum Products by State, October 31, 1988
(Thousand Barrels)

| State | Leaded Motor Gasoline | Unleaded Motor Gasoline | Kerosene | Distillate Fuel Oil | Residual Fuel Oil |
|---|---|---|---|---|---|
| **PAD District I Total** | **6,432** | **33,253** | **2,919** | **49,386** | **17,608** |
| Connecticut | 361 | 995 | 362 | 4,341 | 211 |
| Delaware, D.C., Maryland | 245 | 2,071 | 241 | 4,339 | 1,709 |
| Florida | 874 | 4,651 | 203 | 2,177 | 1,167 |
| Georgia | 773 | 1,908 | 129 | 1,204 | 274 |
| Maine, New Hampshire, Vermont | 195 | 937 | 383 | 2,390 | 735 |
| Massachusetts | 127 | 1,585 | 19 | 3,189 | 1,182 |
| New Jersey | 825 | 6,665 | 89 | 13,381 | 6,743 |
| New York | 716 | 3,404 | 353 | 6,933 | 2,403 |
| North Carolina | 599 | 2,029 | 303 | 1,619 | 357 |
| Pennsylvania | 738 | 4,264 | 514 | 5,277 | 1,372 |
| Rhode Island | 11 | 570 | w | 1,378 | w |
| South Carolina | 411 | 1,328 | 184 | 744 | w |
| Virginia | 461 | 2,616 | 111 | 2,309 | 802 |
| West Virginia | 96 | 230 | w | 105 | w |
| **PAD District II Total** | **8,812** | **25,361** | **2,011** | **20,958** | **3,574** |
| Illinois | 1,777 | 5,707 | 409 | 4,236 | 1,481 |
| Indiana | 935 | 2,938 | 186 | 2,710 | 511 |
| Iowa | 431 | 1,110 | w | 835 | w |
| Kansas, Nebraska | 1,090 | 1,998 | 46 | 2,219 | 66 |
| Kentucky | 378 | 930 | 91 | 635 | w |
| Michigan | 711 | 2,869 | 160 | 1,726 | 157 |
| Minnesota | 453 | 1,277 | w | 1,750 | 130 |
| Missouri | 392 | 870 | w | 678 | w |
| North Dakota, South Dakota | 196 | 294 | w | 553 | w |
| Ohio | 708 | 3,331 | 599 | 1,926 | 251 |
| Oklahoma | 720 | 1,247 | w | 1,568 | 260 |
| Tennessee | 445 | 1,575 | 84 | 804 | 232 |
| Wisconsin | 576 | 1,215 | w | 1,318 | 159 |
| **PAD District III Total** | **5,904** | **23,164** | **1,567** | **21,825** | **11,542** |
| Alabama | 363 | 1,220 | 99 | 828 | 646 |
| Arkansas | 116 | 201 | w | 251 | w |
| Louisiana | 1,209 | 4,352 | 494 | 3,990 | 4,487 |
| Mississippi | 732 | 1,765 | 61 | 2,529 | w |
| New Mexico | 178 | 277 | w | 219 | 11 |
| Texas | 3,306 | 15,349 | 907 | 14,008 | 6,288 |
| **PAD District IV Total** | **1,341** | **2,185** | **82** | **2,091** | **595** |
| Colorado | 360 | 845 | w | 279 | w |
| Idaho | 160 | 228 | w | 193 | w |
| Montana | 367 | 479 | w | 645 | 98 |
| Utah | 153 | 266 | w | 373 | 154 |
| Wyoming | 301 | 367 | w | 601 | w |
| **PAD District V Total** | **6,320** | **13,996** | **226** | **10,395** | **8,992** |
| Alaska | 264 | 426 | w | 904 | w |
| Arizona | 298 | 579 | w | 254 | w |
| California | 3,489 | 8,956 | 166 | 6,249 | 5,069 |
| Hawaii | 127 | 548 | w | 398 | w |
| Nevada | 119 | 278 | w | 200 | w |
| Oregon | 795 | 1,046 | w | 789 | 201 |
| Washington | 1,228 | 2,163 | w | 1,601 | 1,987 |
| **U.S. Total** | **28,809** | **97,959** | **6,805** | **104,655** | **42,311** |

w = Withheld to avoid disclosure of individual company data.
Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 26. Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, and Barge Between PAD Districts, October 1988
(Thousand Barrels)

| Commodity | From I to | | | From II to | | | | From III to | | | | From IV to | | | From V to | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | II | III | V | I | III | IV | V | I | II | IV | V | II | III | V | I | II | III | IV |
| **Crude Oil** | **0** | **0** | **0** | **183** | **2,644** | **575** | **0** | **454** | **48,044** | **0** | **0** | **4,750** | **2,535** | **0** | **1,212** | **0** | **14,021** | **0** |
| **Petroleum Products** | **7,161** | **131** | **0** | **3,829** | **6,748** | **1,794** | **0** | **76,893** | **30,393** | **0** | **1,732** | **1,289** | **1,752** | **1,043** | **0** | **0** | **50** | **0** |
| Pentanes Plus | 0 | 0 | 0 | 0 | 126 | 0 | 0 | 0 | 815 | 0 | 0 | 60 | 107 | 0 | 0 | 0 | 0 | 0 |
| Liquefied Petroleum Gases | 0 | 0 | 0 | 610 | 3,745 | 73 | 0 | 2,522 | 4,436 | 0 | 0 | 516 | 1,645 | 0 | 0 | 0 | 0 | 0 |
| Unfinished Oils | 0 | 0 | 0 | 0 | 74 | 0 | 0 | 124 | 445 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Blending Components | | | | | | | | | | | | | | | | | | |
| Motor Gasoline | 10 | 0 | 0 | 93 | 0 | 0 | 0 | 181 | 37 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Aviation Gasoline | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Finished Motor Gasoline | 4,425 | 0 | 0 | 2,034 | 1,418 | 982 | 0 | 42,390 | 14,149 | 0 | 885 | 419 | 0 | 753 | 0 | 0 | 0 | 0 |
| Finished Leaded Motor Gasoline | 887 | 0 | 0 | 219 | 302 | 209 | 0 | 5,063 | 1,957 | 0 | 246 | 154 | 0 | 266 | 0 | 0 | 0 | 0 |
| Finished Unleaded Motor Gasoline | 3,538 | 0 | 0 | 1,815 | 1,116 | 773 | 0 | 37,327 | 12,192 | 0 | 639 | 265 | 0 | 487 | 0 | 0 | 0 | 0 |
| Finished Aviation Gasoline | 6 | 0 | 0 | 0 | 0 | 17 | 0 | 294 | 107 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Naphtha-Type Jet Fuel | 0 | 0 | 0 | 0 | 148 | 0 | 0 | 785 | 0 | 0 | 228 | 25 | 0 | 68 | 0 | 0 | 0 | 0 |
| Kerosene-Type Jet Fuel | 394 | 0 | 0 | 238 | 192 | 497 | 0 | 11,195 | 3,616 | 0 | 163 | 4 | 0 | 89 | 0 | 0 | 0 | 0 |
| Kerosene | 58 | 0 | 0 | 99 | 172 | 0 | 0 | 457 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Distillate Fuel Oil | 2,212 | 0 | 0 | 470 | 431 | 225 | 0 | 16,585 | 5,792 | 0 | 402 | 265 | 0 | 133 | 0 | 0 | 0 | 0 |
| Residual Fuel Oil | 0 | 0 | 0 | 0 | 424 | 0 | 0 | 449 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Petrochemical Feedstocks[1] | 56 | 0 | 0 | 15 | 8 | 0 | 0 | 40 | 45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Special Naphthas | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 335 | 116 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lubricants | 0 | 83 | 0 | 101 | 10 | 0 | 0 | 1,000 | 287 | 0 | 54 | 0 | 0 | 0 | 0 | 0 | 50 | 0 |
| Waxes | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Asphalt and Road Oil | 0 | 23 | 0 | 169 | 0 | 0 | 0 | 458 | 533 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Miscellaneous Products | 0 | 25 | 0 | 0 | 0 | 0 | 0 | 72 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | **7,161** | **131** | **0** | **4,012** | **9,392** | **2,369** | **0** | **77,347** | **78,437** | **0** | **1,732** | **6,039** | **4,287** | **1,043** | **1,212** | **0** | **14,071** | **0** |

[1] Includes naphtha less than 400 degrees F endpoint and other oils equal to or greater than 400 degrees F endpoint.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 27. Movements of Crude Oil and Petroleum Products by Pipeline Between PAD Districts, October 1988
(Thousand Barrels)

| Commodity | From I to | | From II to | | | From III to | | | | From IV to | | | From V to | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | II | III | I | III | IV | I | II | IV | V | II | III | V | III | IV |
| **Crude Oil** | 0 | 0 | 20 | 2,644 | 575 | 0 | 48,044 | 0 | 0 | 4,750 | 2,535 | 0 | 3,072 | 0 |
| **Petroleum Products** | 7,095 | 0 | 1,892 | 6,232 | 1,794 | 61,548 | 25,941 | 0 | 1,678 | 1,289 | 1,752 | 1,043 | 0 | 0 |
| Pentanes Plus | 0 | 0 | 0 | 126 | 0 | 0 | 815 | 0 | 0 | 60 | 107 | 0 | 0 | 0 |
| Liquefied Petroleum Gases | 0 | 0 | 610 | 3,745 | 73 | 2,304 | 4,402 | 0 | 0 | 516 | 1,645 | 0 | 0 | 0 |
| Blending Components | | | | | | | | | | | | | | |
| Motor Gasoline | 0 | 0 | 93 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Aviation Gasoline | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Finished Motor Gasoline | 4,425 | 0 | 982 | 1,418 | 982 | 34,909 | 12,300 | 0 | 885 | 419 | 0 | 753 | 0 | 0 |
| Finished Leaded Motor Gasoline | 887 | 0 | 91 | 302 | 209 | 4,142 | 1,701 | 0 | 246 | 154 | 0 | 266 | 0 | 0 |
| Finished Unleaded Motor Gasoline | 3,538 | 0 | 891 | 1,116 | 773 | 30,767 | 10,599 | 0 | 639 | 265 | 0 | 487 | 0 | 0 |
| Finished Aviation Gasoline | 6 | 0 | 0 | 0 | 17 | 42 | 98 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Naphtha-Type Jet Fuel | 0 | 0 | 0 | 148 | 0 | 221 | 0 | 0 | 228 | 25 | 0 | 68 | 0 | 0 |
| Kerosene-Type Jet Fuel | 394 | 0 | 116 | 192 | 497 | 9,085 | 3,397 | 0 | 163 | 4 | 0 | 89 | 0 | 0 |
| Kerosene | 58 | 0 | 0 | 172 | 0 | 411 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Distillate Fuel Oil | 2,212 | 0 | 91 | 431 | 225 | 14,576 | 4,929 | 0 | 402 | 265 | 0 | 133 | 0 | 0 |
| Residual Fuel Oil | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Miscellaneous Products | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | 7,095 | 0 | 1,912 | 8,876 | 2,369 | 61,548 | 73,985 | 0 | 1,678 | 6,039 | 4,287 | 1,043 | 3,072 | 0 |

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 28. Movements of Crude Oil and Petroleum Products by Tanker and Barge Between PAD Districts, October 1988
(Thousand Barrels)

| Commodity | From I to | | | From II to | | | From III to | | | | | | From V to | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | II | III | V | I | III | V | I | New England | Central Atlantic | Lower Atlantic | II | V | I | II | III |
| **Crude Oil** | 0 | 0 | 0 | 163 | 0 | 0 | 454 | 0 | 454 | 0 | 0 | 0 | 1,212 | 0 | 10,949 |
| **Petroleum Products** | 66 | 131 | 0 | 1,937 | 516 | 0 | 15,345 | 0 | 1,963 | 13,382 | 4,452 | 54 | 0 | 0 | 50 |
| Liquefied Petroleum Gases | 0 | 0 | 0 | 0 | 0 | 0 | 218 | 0 | 0 | 218 | 34 | 0 | 0 | 0 | 0 |
| Unfinished Oils | 0 | 0 | 0 | 0 | 74 | 0 | 124 | 0 | 28 | 96 | 445 | 0 | 0 | 0 | 0 |
| Motor Gasoline Blending Components | 10 | 0 | 0 | 0 | 0 | 0 | 181 | 0 | 181 | 0 | 37 | 0 | 0 | 0 | 0 |
| Finished Motor Gasoline | 0 | 0 | 0 | 1,052 | 0 | 0 | 7,481 | 0 | 0 | 7,481 | 1,849 | 0 | 0 | 0 | 0 |
| Finished Leaded Motor Gasoline | 0 | 0 | 0 | 128 | 0 | 0 | 921 | 0 | 0 | 921 | 256 | 0 | 0 | 0 | 0 |
| Finished Unleaded Motor Gasoline | 0 | 0 | 0 | 924 | 0 | 0 | 6,560 | 0 | 0 | 6,560 | 1,593 | 0 | 0 | 0 | 0 |
| Finished Aviation Gasoline | 0 | 0 | 0 | 0 | 0 | 0 | 252 | 0 | 146 | 106 | 9 | 0 | 0 | 0 | 0 |
| Naphtha-Type Jet Fuel | 0 | 0 | 0 | 0 | 0 | 0 | 564 | 0 | 0 | 564 | 0 | 0 | 0 | 0 | 0 |
| Kerosene-Type Jet Fuel | 0 | 0 | 0 | 122 | 0 | 0 | 2,110 | 0 | 235 | 1,875 | 219 | 0 | 0 | 0 | 0 |
| Kerosene | 0 | 0 | 0 | 99 | 0 | 0 | 46 | 0 | 22 | 24 | 15 | 0 | 0 | 0 | 0 |
| Distillate Fuel Oil | 0 | 0 | 0 | 379 | 0 | 0 | 2,009 | 0 | 520 | 1,489 | 863 | 0 | 0 | 0 | 0 |
| Residual Fuel Oil | 0 | 0 | 0 | 0 | 424 | 0 | 449 | 0 | 168 | 281 | 0 | 0 | 0 | 0 | 0 |
| Petrochemical Feedstocks[1] | 56 | 0 | 0 | 15 | 8 | 0 | 40 | 0 | 30 | 10 | 45 | 0 | 0 | 0 | 0 |
| Special Naphthas | 0 | 0 | 0 | 0 | 0 | 0 | 335 | 0 | 190 | 145 | 116 | 0 | 0 | 0 | 0 |
| Lubricants | 0 | 83 | 0 | 101 | 10 | 0 | 1,000 | 0 | 387 | 613 | 287 | 54 | 0 | 0 | 50 |
| Waxes | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 |
| Asphalt and Road Oil | 0 | 23 | 0 | 169 | 0 | 0 | 458 | 0 | 14 | 444 | 533 | 0 | 0 | 0 | 0 |
| Miscellaneous Products | 0 | 25 | 0 | 0 | 0 | 0 | 72 | 0 | 36 | 36 | 0 | 0 | 0 | 0 | 0 |
| **Total** | 66 | 131 | 0 | 2,100 | 516 | 0 | 15,799 | 0 | 2,417 | 13,382 | 4,452 | 54 | 1,212 | 0 | 10,999 |

---

[1] Includes naphtha less than 400 degrees F endpoint and other oils equal to or greater than 400 degrees F endpoint.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 29. Net Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, and Barge Between PAD Districts, October 1988
(Thousand Barrels)

| Commodity | PAD District I | | | PAD District II | | | PAD District III | | | PAD District IV | | | PAD District V | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Receipts into PADD I | Shipments from PADD I | Net Receipts PADD I | Receipts into PADD II | Shipments from PADD II | Net Receipts PADD II | Receipts into PADD III | Shipments from PADD III | Net Receipts PADD III | Receipts into PADD IV | Shipments from PADD IV | Net Receipts PADD IV | Receipts into PADD V | Shipments from PADD V | Net Receipts PADD V |
| **Crude Oil** | **1,849** | **0** | **1,849** | **52,794** | **3,402** | **49,392** | **19,200** | **48,498** | **-29,298** | **575** | **7,285** | **-6,710** | **0** | **15,233** | **-15,233** |
| **Petroleum Products** | **80,722** | **7,292** | **73,430** | **38,843** | **12,371** | **26,472** | **8,681** | **109,018** | **-100,337** | **1,794** | **4,084** | **-2,290** | **2,775** | **50** | **2,725** |
| Pentanes Plus | 0 | 0 | 0 | 875 | 126 | 749 | 233 | 815 | -582 | 0 | 167 | -167 | 0 | 0 | 0 |
| Liquefied Petroleum Gases | 3,132 | 0 | 3,132 | 4,952 | 4,428 | 524 | 5,390 | 6,958 | -1,568 | 73 | 2,161 | -2,088 | 0 | 0 | 0 |
| Unfinished Oils | 124 | 0 | 124 | 445 | 74 | 371 | 74 | 569 | -495 | 0 | 0 | 0 | 0 | 0 | 0 |
| Blending Components | | | | | | | | | | | | | | | |
| Motor Gasoline | 274 | 10 | 264 | 47 | 93 | -46 | 0 | 218 | -218 | 0 | 0 | 0 | 0 | 0 | 0 |
| Aviation Gasoline | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Finished Motor Gasoline | 44,424 | 4,425 | 39,999 | 18,993 | 4,434 | 14,559 | 1,418 | 57,424 | -56,006 | 982 | 1,172 | -190 | 1,638 | 0 | 1,638 |
| Finished Leaded Motor Gasoline | 5,282 | 887 | 4,395 | 2,998 | 730 | 2,268 | 302 | 7,266 | -6,964 | 209 | 420 | -211 | 512 | 0 | 512 |
| Finished Unleaded Motor Gasoline | 39,142 | 3,538 | 35,604 | 15,995 | 3,704 | 12,291 | 1,116 | 50,158 | -49,042 | 773 | 752 | 21 | 1,126 | 0 | 1,126 |
| Finished Aviation Gasoline | 294 | 6 | 288 | 113 | 17 | 96 | 0 | 401 | -401 | 17 | 0 | 17 | 0 | 0 | 0 |
| Naphtha-Type Jet Fuel | 785 | 0 | 785 | 25 | 148 | -123 | 148 | 1,013 | -865 | 0 | 93 | -93 | 296 | 0 | 296 |
| Kerosene-Type Jet Fuel | 11,433 | 394 | 11,039 | 4,014 | 927 | 3,087 | 192 | 14,974 | -14,782 | 497 | 93 | 404 | 252 | 0 | 252 |
| Kerosene | 556 | 58 | 498 | 73 | 271 | -198 | 172 | 472 | -300 | 0 | 0 | 0 | 0 | 0 | 0 |
| Distillate Fuel Oil | 17,055 | 2,212 | 14,843 | 8,269 | 1,126 | 7,143 | 431 | 22,779 | -22,348 | 225 | 398 | -173 | 535 | 0 | 535 |
| Residual Fuel Oil | 449 | 0 | 449 | 0 | 424 | -424 | 424 | 449 | -25 | 0 | 0 | 0 | 0 | 0 | 0 |
| Petrochemical Feedstocks[1] | 55 | 56 | -1 | 101 | 23 | 78 | 8 | 85 | -77 | 0 | 0 | 0 | 0 | 0 | 0 |
| Special Naphthas | 335 | 0 | 335 | 116 | 0 | 116 | 0 | 451 | -451 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lubricants | 1,101 | 83 | 1,018 | 287 | 111 | 176 | 143 | 1,341 | -1,198 | 0 | 0 | 0 | 54 | 50 | 4 |
| Waxes | 6 | 0 | 6 | 0 | 0 | 0 | 0 | 6 | -6 | 0 | 0 | 0 | 0 | 0 | 0 |
| Asphalt and Road Oil | 627 | 23 | 604 | 533 | 169 | 364 | 23 | 991 | -968 | 0 | 0 | 0 | 0 | 0 | 0 |
| Miscellaneous Products | 72 | 25 | 47 | 0 | 0 | 0 | 25 | 72 | -47 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | **82,571** | **7,292** | **75,279** | **91,637** | **15,773** | **75,864** | **27,881** | **157,516** | **-129,635** | **2,369** | **11,369** | **-9,000** | **2,775** | **15,283** | **-12,508** |

[1] Includes naphtha less than 400 degrees F endpoint and other oils equal to or greater than 400 degrees F endpoint.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 30. Production of Residual Fuel Oil by Sulfur Content by PAD District, October, 1988

(Thousand Barrels)

| Commodity | PAD District I |  |  | PAD District II |  |  |  | PAD District III |  |  |  |  |  | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | East Coast | Appalachian No.1 | Total | Ind., Ill., Ky. * | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast |  |
| **Residual Fuel Oil** | **4,149** | **83** | **4,232** | **1,639** | **242** | **193** | **2,074** | **494** | **5,684** | **2,240** | **245** | **12** | **8,675** | **342** | **11,420** | **26,743** |
| 0.00 to 0.30% Sulfur | 1,377 | 11 | 1,388 | 79 | 0 | 0 | 79 | 61 | 49 | 698 | 73 | 5 | 886 | 63 | 998 | 3,414 |
| 0.31 to 1.00% Sulfur | 1,742 | 0 | 1,742 | 369 | 0 | 98 | 467 | 346 | 359 | 319 | 132 | 7 | 1,163 | 70 | 2,270 | 5,712 |
| Greater Than 1.00% Sulfur | 1,030 | 72 | 1,102 | 1,191 | 242 | 95 | 1,528 | 87 | 5,276 | 1,223 | 40 | 0 | 6,626 | 209 | 8,152 | 17,617 |

* Effective January 1987 "Appalachian No.2" is combined with "Ind., Ill., Ky.".

Sources and estimation procedures. See Explanatory Notes 1 and 2.

## Table 31. Stocks of Residual Fuel Oil by Sulfur Content by PAD District, October 31, 1988

(Thousand Barrels)

| Commodity | PAD District I |  |  | PAD District II |  |  |  | PAD District III |  |  |  |  |  | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | East Coast | Appalachian No.1 | Total | Ind., Ill., Ky. * | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast |  |
| **Residual Fuel Oil -- 0.00 to 0.30% Sulfur** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 429 | 54 | 483 | 27 | 0 | 0 | 27 | 21 | 45 | 626 | 2 | 6 | 700 | 93 | 736 | 2,039 |
| Bulk Terminal | -- | -- | 3,224 | -- | -- | -- | 216 | -- | -- | -- | -- | -- | 4 | 0 | 77 | 3,521 |
| **Total** | -- | -- | **3,707** | -- | -- | -- | **243** | -- | -- | -- | -- | -- | **704** | **93** | **813** | **5,560** |
| **Residual Fuel Oil -- 0.31 to 1.00% Sulfur** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 1,117 | 0 | 1,117 | 369 | 0 | 80 | 449 | 57 | 335 | 185 | 93 | 5 | 675 | 214 | 1,501 | 3,956 |
| Bulk Terminal | -- | -- | 5,468 | -- | -- | -- | 345 | -- | -- | -- | -- | -- | 2,773 | 0 | 881 | 9,467 |
| **Total** | -- | -- | **6,585** | -- | -- | -- | **794** | -- | -- | -- | -- | -- | **3,448** | **214** | **2,382** | **13,423** |
| **Residual Fuel Oil -- Greater than 1.00% Sulfur** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 567 | 37 | 604 | 1,435 | 249 | 105 | 1,789 | 112 | 3,197 | 1,495 | 34 | 0 | 4,838 | 288 | 3,707 | 11,226 |
| Bulk Terminal | -- | -- | 6,712 | -- | -- | -- | 748 | -- | -- | -- | -- | -- | 2,552 | 0 | 2,090 | 12,102 |
| **Total** | -- | -- | **7,316** | -- | -- | -- | **2,537** | -- | -- | -- | -- | -- | **7,390** | **288** | **5,797** | **23,328** |

* Effective January 1987 "Appalachian No 2" is combined with "Ind., Ill., Ky."

Sources and estimation procedures. See Explanatory Notes 1 and 2

## Table 32. Movements of Residual Fuel Oil by Tanker and Barge Between PAD Districts, by Sulfur Content, October 1988

(Thousand Barrels)

| Commodity | From I to |  |  | From II to |  |  | From III to |  |  |  |  |  | From V to |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | II | III | V | I | III | V | I | New England | Central Atlantic | Lower Atlantic | II | V | I | II | III |
| **Residual Fuel Oil** | **0** | **0** | **0** | **0** | **424** | **0** | **449** | **0** | **168** | **281** | **0** | **0** | **0** | **0** | **0** |
| 0.00 to 0.30% Sulfur | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0.31 to 1.00% Sulfur | 0 | 0 | 0 | 0 | 0 | 0 | 115 | 0 | 0 | 115 | 0 | 0 | 0 | 0 | 0 |
| Greater Than 1.00% Sulfur | 0 | 0 | 0 | 0 | 424 | 0 | 334 | 0 | 168 | 166 | 0 | 0 | 0 | 0 | 0 |

Sources and estimation procedures. See Explanatory Notes 1 and 2.

## Table 33. Imports of Residual Fuel Oil by Sulfur Content by Country of Origin, October 1988

(Thousand Barrels)

| Country | Residual Fuel Oil | | | |
|---|---|---|---|---|
| | 0.00 to 0.30% | 0.31 to 1.00% | Greater Than 1.00% | Total |
| **Arab OPEC** | | | | |
| Algeria | 1,680 | 132 | 0 | 1,812 |
| Iraq | 0 | 0 | 0 | 0 |
| Kuwait | 0 | 0 | 0 | 0 |
| Libya | 0 | 0 | 0 | 0 |
| Neutral Zone | 0 | 0 | 0 | 0 |
| Qatar | 0 | 0 | 0 | 0 |
| Saudi Arabia | 0 | 0 | 0 | 0 |
| United Arab Emirates | 0 | 0 | 0 | 0 |
| Subtotal Arab OPEC | 1,680 | 132 | 0 | 1,812 |
| **Other OPEC** | | | | |
| Ecuador | 0 | 0 | 361 | 361 |
| Gabon | 0 | 0 | 323 | 323 |
| Indonesia | 503 | 0 | 0 | 503 |
| Iran | 0 | 0 | 0 | 0 |
| Nigeria | 505 | 176 | 0 | 681 |
| Venezuela | 136 | 0 | 2,176 | 2,312 |
| Subtotal Other OPEC | 1,144 | 176 | 2,860 | 4,180 |
| **Other** | | | | |
| Angola | 73 | 0 | 0 | 73 |
| Australia | 0 | 0 | 0 | 0 |
| Bahama Islands | 0 | 0 | 354 | 354 |
| Bolivia | 0 | 0 | 0 | 0 |
| Brazil | 305 | 312 | 0 | 617 |
| Brunei | 0 | 0 | 0 | 0 |
| Canada | 237 | 1 | 776 | 1,014 |
| China, People's Republic of | 0 | 0 | 0 | 0 |
| Congo | 331 | 0 | 0 | 331 |
| Egypt | 0 | 0 | 0 | 0 |
| France | 0 | 0 | 0 | 0 |
| Ghana | 0 | 0 | 0 | 0 |
| Liberia | 0 | 0 | 0 | 0 |
| Malaysia | 0 | 0 | 0 | 0 |
| Mexico | 0 | 0 | 382 | 382 |
| Netherlands | 0 | 0 | 0 | 0 |
| Netherlands Antilles | 0 | 0 | 215 | 215 |
| Norway | 0 | 0 | 0 | 0 |
| Oman | 0 | 0 | 0 | 0 |
| Peru | 0 | 0 | 662 | 662 |
| Puerto Rico | 0 | 0 | 0 | 0 |
| Romania | 0 | 0 | 0 | 0 |
| Spain | 0 | 0 | 0 | 0 |
| Syria | 0 | 0 | 0 | 0 |
| Trinidad | 0 | 281 | 660 | 941 |
| Tunisia | 0 | 0 | 0 | 0 |
| United Kingdom | 0 | 889 | 585 | 1,474 |
| Virgin Islands | 86 | 614 | 1,218 | 1,918 |
| Yugoslavia | 0 | 0 | 0 | 0 |
| Zaire | 0 | 0 | 0 | 0 |
| Other Western Hemisphere | 0 | 164 | 681 | 845 |

See footnotes at end of table.

## Table 33. Imports of Residual Fuel Oil by Sulfur Content by Country of Origin, October 1988 (continued)
(Thousand Barrels)

| Country | Residual Fuel Oil | | | |
|---|---|---|---|---|
| | 0.00 to 0.30% | 0.31 to 1.00% | Greater Than 1.00% | Total |
| **Other** | | | | |
| Other Eastern Hemisphere | 538 | 837 | 0 | 1,375 |
| Subtotal Other | 1,570 | 3,098 | 5,533 | 10,201 |
| **Total Imports** | **4,394** | **3,406** | **8,393** | **16,193** |

Note: Total may not equal sum of components due to independent rounding.
Sources and estimation procedures: See Explanatory Notes 1 and 2.

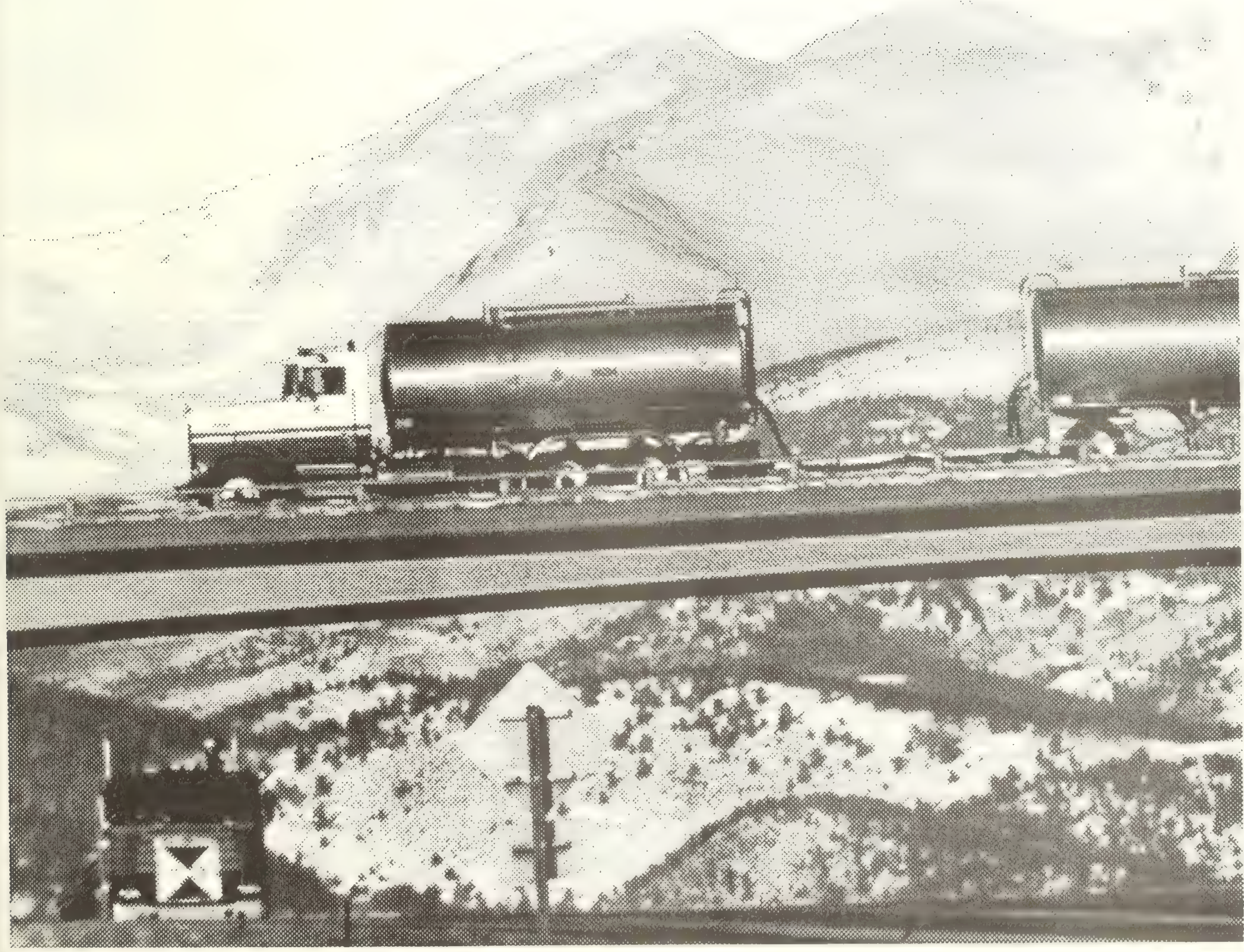
## Table 34. Imports of Residual Fuel Oil by Sulfur Content by State of Entry, October 1988
(Thousand Barrels)

| State | Residual Fuel Oil | | | |
|---|---|---|---|---|
| | 0.00 to 0.30% | 0.31 to 1.00% | Greater Than 1.00% | Total |
| **PAD District I** | **3,417** | **3,405** | **8,090** | **14,912** |
| Connecticut | 0 | 215 | 0 | 215 |
| Florida | 0 | 933 | 849 | 1,782 |
| Maine | 0 | 0 | 431 | 431 |
| Maryland | 0 | 0 | 68 | 68 |
| Massachusetts | 0 | 511 | 1,235 | 1,746 |
| New Hampshire | 0 | 0 | 183 | 183 |
| New Jersey | 530 | 958 | 1,073 | 2,561 |
| New York | 2,299 | 641 | 2,294 | 5,234 |
| North Carolina | 136 | 0 | 380 | 516 |
| Pennsylvania | 452 | 147 | 388 | 987 |
| South Carolina | 0 | 0 | 150 | 150 |
| Vermont | 0 | 0 | 6 | 6 |
| Virginia | 0 | 0 | 1,033 | 1,033 |
| **PAD District II** | **142** | **1** | **104** | **247** |
| Michigan | 142 | 1 | 39 | 182 |
| North Dakota | 0 | 0 | 35 | 35 |
| Ohio | 0 | 0 | 30 | 30 |
| **PAD District III** | **99** | **0** | **199** | **298** |
| Alabama | 0 | 0 | 199 | 199 |
| Texas | 99 | 0 | 0 | 99 |
| **PAD District V** | **736** | **0** | **0** | **736** |
| California | 503 | 0 | 0 | 503 |
| Hawaii | 233 | 0 | 0 | 233 |
| **All PAD Districts** | **4,394** | **3,406** | **8,393** | **16,193** |

Note: Total may not equal sum of components due to independent rounding.
Sources and estimation procedures: See Explanatory Notes 1 and 2.

# Appendix A

## District Descriptions and Maps



*Tank trucks are used to pick up crude oil gathered at leases in remote areas.*

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## Appendix A

# District Descriptions and Maps

The following are the Refining Districts which make up the Petroleum Administration for Defense (PAD) Districts.

## PAD District I

*East Coast:* District of Columbia and the States of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New Jersey, Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, Florida, and the following counties of the State of New York: Cayuga, Tompkins, Chemung, and all counties east and north thereof. Also the following counties in the State of Pennsylvania: Bradford, Sullivan, Columbia, Montour, Northumberland, Dauphin, York, and all counties east thereof.

*Appalachian No. 1:* The State of West Virginia and those parts of the States of Pennsylvania and New York not included in the East Coast District.

## PAD District II

*Indiana-Illinois-Kentucky*: The States of Indiana, Illinois, Kentucky, Tennessee, Michigan, and Ohio.

*Minnesota-Wisconsin-North and South Dakota:* The States of Minnesota, Wisconsin, North Dakota, and South Dakota.

*Oklahoma-Kansas-Missouri:* The States of Oklahoma, Kansas, Missouri, Nebraska, and Iowa.

## PAD District III

*Texas Inland:* The State of Texas except the Texas Gulf Coast District.

*Texas Gulf Coast:* The following counties of the State of Texas: Newton, Orange, Jefferson, Jasper, Tyler, Hardin, Liberty, Chambers, Polk, San Jacinto, Montgomery, Harris, Galveston, Waller, Fort Bend, Brazoria, Wharton, Matagorda, Jackson, Victoria, Calhoun, Refugio, Aransas, San Patricio, Nueces, Kleberg, Kenedy, Willacy, and Cameron.

*Louisiana Gulf Coast:* The following Parishes of the State of Louisiana: Vernon, Rapides, Avoyelles, Pointe Coupee, West Feliciana, East Feliciana, Saint Helena, Tangipahoa, Washington, and all Parishes south thereof. Also the following counties of the State of Mississippi: Pearl River, Stone, George, Hancock, Harrison, and Jackson. Also the following counties of the State of Alabama: Mobile and Baldwin.

*North Louisiana-Arkansas:* The State of Arkansas and those parts of the States of Louisiana, Mississippi, and Alabama not included in the Louisiana Gulf Coast District.

*New Mexico:* The State of New Mexico.

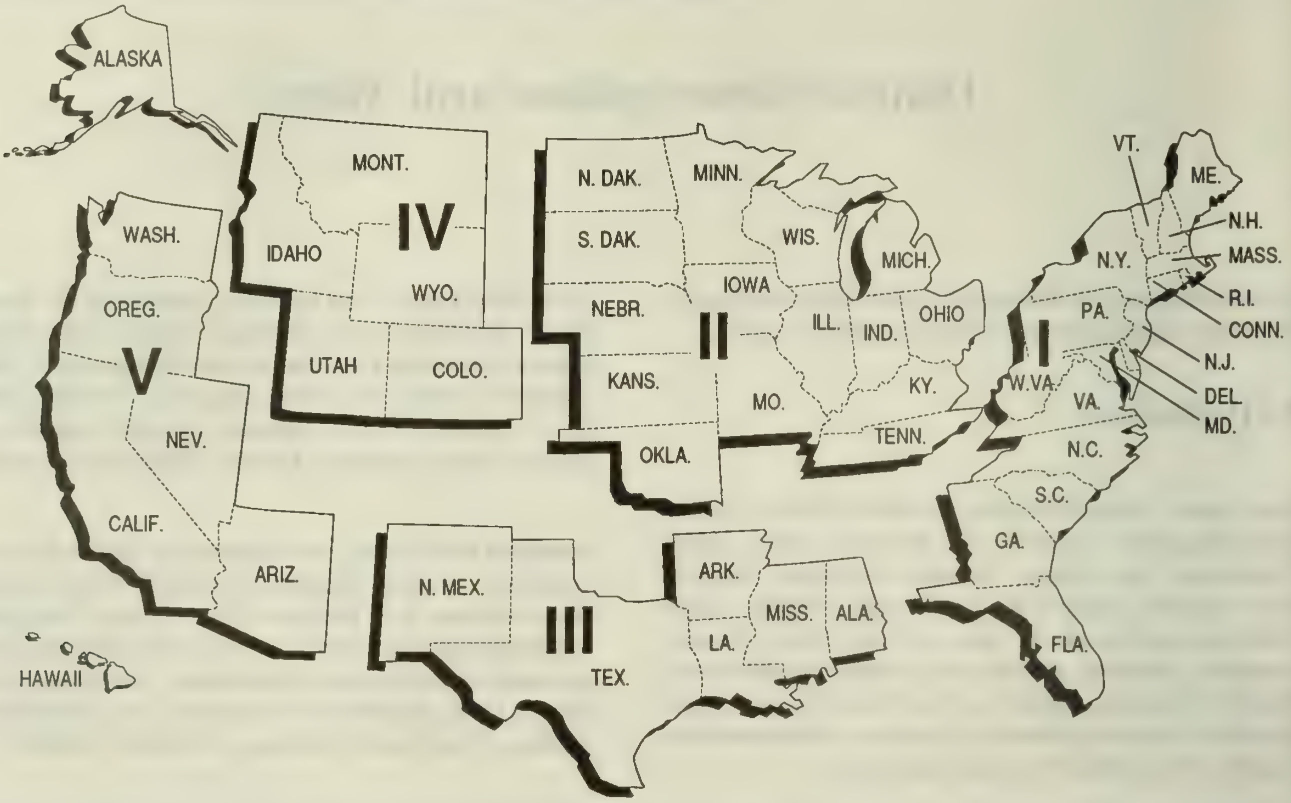
## PAD District IV

*Rocky Mountain:* The States of Montana, Idaho, Wyoming, Utah, and Colorado.

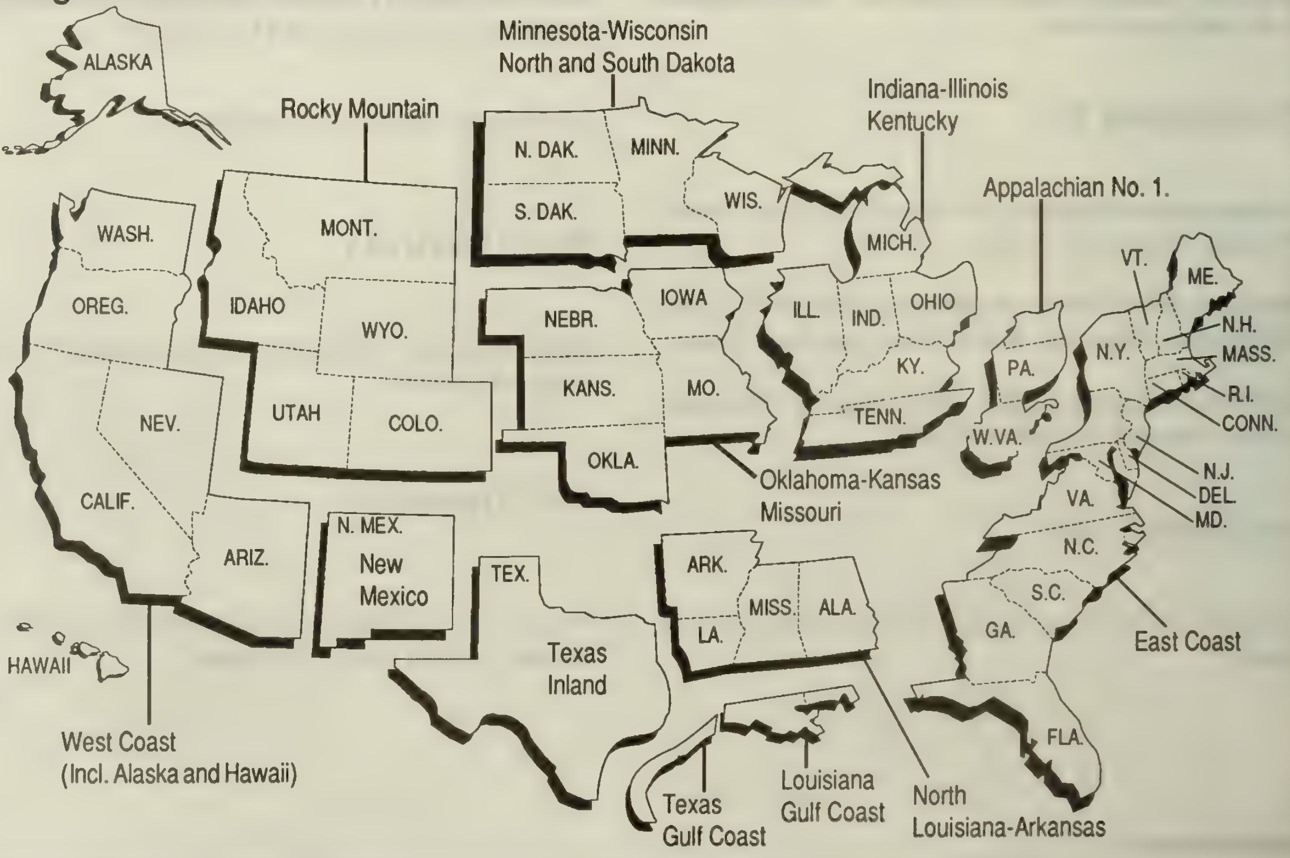
## PAD District V

*West Coast:* The States of Washington, Oregon, California, Nevada, Arizona, Alaska, and Hawaii.

## Petroleum Administration for Defense (PAD) Districts

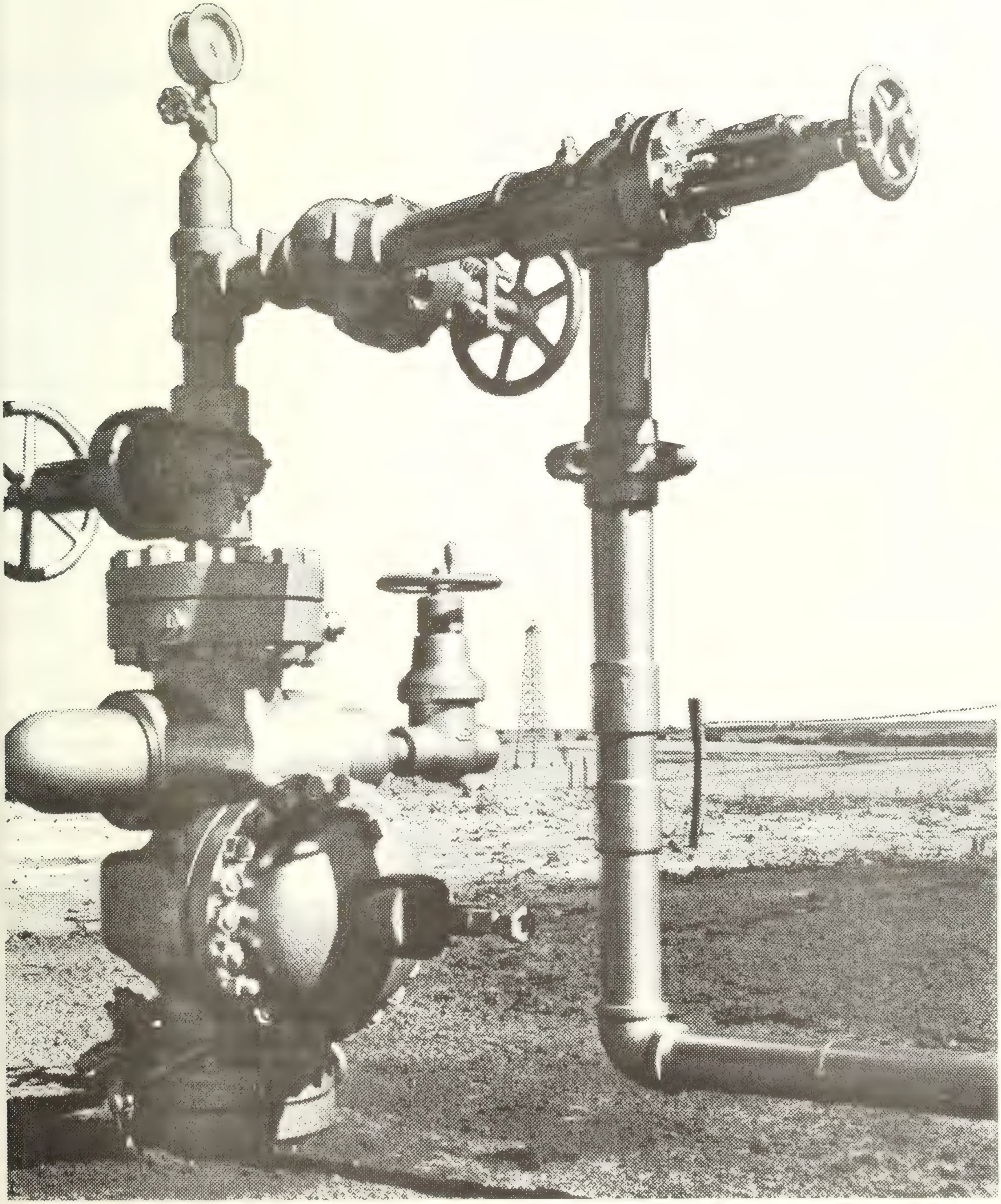


## Refining Districts



# Appendix B

## Explanatory Notes



*The cluster of pipes and valves that control the flow of oil at the mouth of an oil well is what oilmen call a "Christmas Tree."*

## Appendix B

# Explanatory Notes

## Note 1: Data Collection Methodology

### Background

The Petroleum Supply Reporting System (PSRS) represents a family of data collection survey forms, data processing systems and publication systems that have been consolidated to achieve comparability and consistency throughout. The survey forms that comprise the PSRS are:

| *Form Number* | *Name* |
|---|---|
| EIA-800 | Weekly Refinery Report |
| EIA-801 | Weekly Bulk Terminal Report |
| EIA-802 | Weekly Product Pipeline Report |
| EIA-803 | Weekly Crude Oil Stocks Report |
| EIA-804 | Weekly Imports Report |
| EIA-810 | Monthly Refinery Report |
| EIA-811 | Monthly Bulk Terminal Report |
| EIA-812 | Monthly Product Pipeline Report |
| EIA-813 | Monthly Crude Oil Report |
| EIA-814 | Monthly Imports Report |
| EIA-816 | Monthly Natural Gas Liquids Report |
| EIA-817 | Monthly Tanker and Barge Movement Report |
| EIA-820 | Annual Refinery Report |

Forms EIA-800 through 804 comprise the Weekly Petroleum Supply Reporting System (WPSRS). This system is designed to collect weekly data on basic refinery operations and on crude oil and major petroleum products stocks and imports. Data from the WPSRS are published in the *Weekly Petroleum Status Report* (WPSR) and are also used to calculate the preliminary statistics in the "Summary Statistics" section of the *Petroleum Supply Monthly* (PSM). A description of the WPSRS survey forms follows in Explanatory Note 1.1.

Forms EIA-810 through 814, 816, and 817 comprise the Monthly Petroleum Supply Reporting System (MPSRS). These surveys collect detailed refinery and natural gas plant operations data; refinery, bulk terminal, natural gas plant, and pipeline stocks data; crude oil and petroleum product imports data; and data on movements of petroleum products and crude oil between Petroleum Administration for Defense (PAD) Districts. These surveys are the primary source of data for the "Summary Statistics" and "Detailed Statistics" sections of the PSM. A description of MPSRS survey forms follows in Explanatory Note 1.2.

Data are also obtained on magnetic tape from the Bureau of the Census on a monthly basis. These tapes contain aggregated import and export statistics that are used in the preparation of the PSM. A description of the Census data follows in Explanatory Note 1.3.

## Note 1.1: Weekly Petroleum Supply Reporting System (WPSRS)

### Background

The EIA first began publishing weekly petroleum supply statistics in April 1979 using data from an external source. Estimates from the EIA's weekly sample surveys (inaugurated in April 1979) replaced the estimates from the external source for all but the imports series in January 1980, and replaced the imports estimates in June 1980.

The weekly surveys collect data comparable to those collected on a monthly basis. Selected petroleum companies report weekly data to the EIA on crude oil and petroleum product stocks, refinery inputs and production, and crude oil and petroleum product imports. On Forms EIA-800 through EIA-803, companies report data on a custody basis. On the Form EIA-804, the importer of record reports all shipments entering the United States. Current weekly data and the most recent monthly data are used to estimate the totals that are published in the *Weekly Petroleum Status Report.*

### Sample Frame

The sample of companies that report weekly is selected from the universe of companies that report on the comparable monthly surveys. Sampled companies report data only for facilities in the 50 States and District of Columbia.

The sample for each survey is taken from the following universe:

**EIA-800:** Based on the EIA-810 universe which includes all petroleum refineries and blending plants located in the 50 States, District of Columbia, Puerto Rico, the Virgin Islands, and Guam. The selected sample size is 151.

**EIA-801:** Based on the EIA-811 universe which includes every bulk terminal operating in the 50 States, the District of Columbia, Puerto Rico, and the Virgin Islands. A bulk terminal is primarily used for storage and/or marketing of petroleum products and has a total bulk storage capacity of 50,000 barrels or more, and/or receives petroleum products by tanker, barge, or pipeline. Bulk terminal facilities associated with a product pipeline are included. The selected sample size is 68.

**EIA-802:** Based on the EIA-812 universe which includes all product pipeline companies that carry petroleum products (including interstate, intrastate, and intracompany pipelines) in the 50 States and the District of Columbia. The selected sample size is 39.

**EIA-803:** Based on the EIA-813 universe which includes companies that carry or store 1,000 barrels or more of crude oil. Included in this survey are gathering and trunk pipeline companies (including interstate, intrastate, and intracompany pipelines), crude oil producers, terminal operators, storers of crude oil (except refineries), and companies transporting Alaskan crude oil by water in the 50 States and the District of Columbia. The selected sample size is 79.

**EIA-804:** Based on the EIA-814 universe which covers each company, including subsidiary or affiliated companies, that import crude oil, unfinished oils, and finished petroleum products into the United States and Puerto Rico. The selected sample size is 103.

### Sampling Method

The sampling procedure used for the weekly system is the cut-off method. In the cut-off method, companies are ranked from largest to smallest on the basis of the quantities reported during some previous period. Companies are chosen for the sample beginning with the largest and adding companies until the total sample covers about 90 percent of the total for each item and each geographic region for which weekly data are published.

### Collection Methods

Data are collected by mail, mailgram, telephone, Telex, and Telefax on a weekly basis. The report period begins and ends each Friday at 7 a.m. All canvassed firms must file reports by 5 p.m. on the following Monday.

### Estimation and Imputation

After company reports have been checked and entered into the weekly data base, weekly totals for given products are estimated by using the following formula.

The total reported by all companies for the most recent month, ($M_t$), is divided by the amount reported by the sample of companies for the most recent month, ($M_s$). The result is multiplied by the amount reported by the sample of companies for the current week, ($W_s$). The answer, $W_t$, is an estimate of the amount that would have been reported by all companies for the current week if all companies reported each week.

$$W_t = \frac{M_t}{M_s} (W_s)$$

This procedure is used to estimate total weekly refinery inputs and production.

To estimate stocks of finished products, the preceding procedure is followed separately for refineries, bulk terminals, and pipelines. Total estimates are formed by summing over establishment types.

Weekly imports data are highly variable on a company-by-company basis or a week-by-week basis. Therefore, an exponentially smoothed ratio has been developed. The estimate of weekly imports is the sum of the smoothed ratios multiplied by the weekly values and estimates for shipments from Puerto Rico. Imports of other oils includes an adjustment from Census data for selected products because of coverage differences between the monthly imports data and Census data.

Explicit imputation is done for companies which do not respond in a given week. The imputed values are exponentially smoothed means of recent reports from the specific company.

### Response Rate

The response rate for the published estimates is usually between 97 and 100 percent of the sampled respondents.

## Note 1.2: Monthly Petroleum Supply Reporting System (MPSRS)

### Background

The MPSRS was implemented in January 1983 as the result of an extensive effort to integrate the collection and processing of petroleum supply data that have been collected on other

survey forms for many years. The collection of monthly petroleum supply statistics began as early as 1918 when the Bureau of Mines (BOM) began collecting data on refinery operations and crude oil stocks and movements. The collection systems were further expanded to include natural gas plant liquids production and storage in 1925, imports of crude oil and petroleum products and storage and movement of petroleum products in 1959, and tanker and barge movements of crude oil and petroleum products in 1964. Since their inception, each survey has undergone numerous changes, but the MPSRS is the first effort to make them all consistent and comparable.

### Respondent Frame

**EIA-810**: All petroleum refineries and blending plants located in the 50 States, District of Columbia, Puerto Rico, the Virgin Islands, and Guam. Approximately 260 respondents report on the EIA-810.

**EIA-811**: Every bulk terminal operating in the 50 States, the District of Columbia, Puerto Rico, and the Virgin Islands. A bulk terminal is primarily used for storage and/or marketing of petroleum products and has a total bulk storage capacity of 50,000 barrels or more, and/or receives petroleum products by tanker, barge, or pipeline. Bulk terminal facilities associated with a product pipeline are included. Approximately 320 respondents report on the EIA-811.

**EIA-812**: All product pipeline companies that carry petroleum products (including interstate, intrastate, and intracompany pipelines) in the 50 States and the District of Columbia. Approximately 90 respondents report on the EIA-812.

**EIA-813**: All companies which carry or store 1,000 barrels or more of crude oil. Included in this survey are gathering and trunk pipeline companies (including interstate, intrastate, and intracompany pipelines), crude oil producers, terminal operators, storers of crude oil (except refineries), and companies transporting Alaskan crude oil by water in the 50 States and the District of Columbia. Approximately 180 respondents report on the EIA-813.

**EIA-814**: All companies, including subsidiary or affiliated companies, that import crude oil, unfinished oils, and finished petroleum products into the United States and Puerto Rico. Approximately 1,500 respondents report on the EIA-814.

**EIA-816**: All facilities that extract liquid hydrocarbons from a natural gas stream (natural gas processing plant) and/or separate a liquid hydrocarbon stream into its component products (fractionator). Approximately 1,050 respondents report on the EIA-816.

**EIA-817**: All companies that have custody of crude oil or petroleum products transported by tanker or barge between PAD Districts or between the Panama Canal and the United States. For purposes of this report, custody is defined as physical possession of crude oil or petroleum products on a company owned tanker or barge. Also, companies which lease vessels or contract for the movement of crude oil or petroleum products on a tanker or barge between PAD Districts or between the Panama Canal and the United States are considered to have custody. Approximately 50 respondents report on the EIA-817.

EIA utilizes a number of sources and methods to maintain the survey respondent lists. On a regular basis, survey managers review industry publications such as the *Oil and Gas Journal* and *Oil Daily* for information on facilities or companies starting up or closing down operations. These sources are augmented by articles in newspapers, letters from respondents indicating changes in status and information received from survey systems operated by other offices.

Every three years an extensive survey is conducted to completely refresh the frames. This involves consolidating information from every known source including State agencies, Federal agencies (e.g., EPA, Corps of Engineers, Census Bureau, etc.), and private industry directories. The effort also includes the evaluation of the impact of potential frame changes on the historical time series of data published from these respondents. The results of this frame study are usually implemented in January to provide a full year under the same frame.

### Collection Methods

The data for all of the MPSRS surveys are collected monthly. Completed forms are required to be postmarked by the 20th calendar day following the end of the report month, with the exception of the EIA-814 which is due 15 work days following the end of the report month. Telephone follow-up calls are made to nonrespondents prior to the publication deadline, for their data. An automated mailing list is maintained and is used to monitor receipt of the forms.

### Imputing Missing Data

Imputation is performed for companies that do not respond to EIA Forms 810-813 and 816. For such companies, previous monthly values are used for current values. The previous month's ending stocks value is used for both the current month's beginning stocks and the current month's ending stocks. Data for nonrespondents on the EIA-814 and 817 are not imputed.

### Response Rate

The response rate is generally 99 to 100 percent by the time the data are first published. Nonrespondents are contacted in

writing and reminded of their requirement to report. Companies that file late or fail to file are subject to criminal fines, civil penalties, and other sanctions as provided by Section 13(i) of the FEA Act.

## Note 1.3: Census Import (IM-145) and Export (EM-522 and EM-594) Data

### Background

Each month the EIA purchases magnetic tapes of aggregated import and export statistics from the Bureau of the Census. These data tapes are the only source of export statistics and are used to augment the import data collected by the EIA.

### Import Statistics (IM-145)

### Coverage

Census import statistics used in the PSM reflect both government and nongovernment imports of merchandise from foreign countries and U.S. possessions into the United States (the 50 States and the District of Columbia) without regard to whether or not a commercial transaction is involved. The following types of transactions are excluded from the statistics:

1. Merchandise in-transit through the United States, when documented with Customs as an in-transit movement.

2. U.S. merchandise that was held in foreign countries by the U.S. Armed Forces and is returned to the United States for the use of the Armed Forces.

### Source of Import Information

The official U.S. import statistics are compiled by the Bureau of the Census from copies of the import entry and warehouse withdrawal forms that importers are required by law to file with Customs officials (Customs Forms 7501, 7505, and 7506).

### Country and Area of Origin

The country reported in the statistics as the country of origin is defined as the country where the merchandise was grown, mined, or manufactured. In instances where the country of origin cannot be determined, the transactions are credited to the country of shipment.

### Export Statistics (EM-522 and EM-594)

Census export statistics used in the PSM reflect both government and nongovernment exports of domestic and foreign merchandise from the United States (the 50 States and the District of Columbia) to foreign countries and U.S. possessions, without regard to whether or not the exportation involves a commercial transaction. The following types of transactions are excluded from the statistics:

1. Merchandise shipped in-transit through the United States from one foreign country to another, when documented as such with U.S. Customs.

2. Bunker fuels and other supplies and equipment for use on departing vessels, planes, or other carriers engaged in foreign trade.

### Source of Export Information

The official U.S. export statistics are compiled by the Bureau of the Census. Exporters are required to file export documents with Customs officials (Customs Form 7525).

### Country and Area of Destination

The country of destination is defined as the country of ultimate destination or the country where the goods are to be consumed, further processed, or manufactured, as known to the shipper at the time of exportation. If the shipper does not know the country of ultimate destination, the shipment is credited to the last country to which the shipper knows that the merchandise will be shipped in the same form as it was when exported.

## Note 2: Supply

The components of petroleum supply are field production, refinery production, imports, and stock withdrawal or addition:

**Field Production** is the sum of crude oil production (including lease condensate), natural gas processing plant production, and new supply (field production) of other liquids used by refineries.

Crude oil production is estimated based on data received from State conservation agencies. For further explanation, see Explanatory Note 3.

Field production of natural gas plant liquids (NGPL), including finished petroleum products, is reported monthly on survey Form EIA-816, *Monthly Natural Gas Liquids Report*. Negative production will occur when the amount of a product produced during the month is less than the amount of that same product that is reprocessed (input) or reclassified to become another product during the same month. For survey descriptions and other details, see Explanatory Note 1.2.

**Refinery Production** of petroleum products is reported monthly on survey Form EIA-810, *Monthly Refinery Report*. Published production of these products equals refinery production minus refinery input. Refinery production of unfinished oils and of motor and aviation gasoline blending components appears on a net basis under refinery input. Negative production will occur when the amount of a product produced during the month is less than the amount of that same product that is reprocessed (input) or reclassified to become another product during the same month.

**Imports** of crude oil and petroleum products are reported monthly on Form EIA-814, *Monthly Imports Report*. In addition, imports of NGL's are obtained from the Census Bureau Tabulation IM-145. The Census Bureau Tabulation IM-145 summarizes import data from Customs import declarations reported on Customs Forms 7501, 7505, and 7506. Additional data taken from the IM-145 are relatively small quantities of naphtha-type and kerosene-type jet fuels, distillate fuel oils, and residual fuel oils withdrawn from bonded storage for use in international trade. Even though these duty-free fuels are stored on United States shores, they did not enter the United States for domestic consumption and therefore are not included in the Form EIA-814 reporting system.

**Stock Withdrawal (+) or Addition (-)** is calculated by subtracting stocks at the end of the month from stocks at the beginning of the same month. (Note: The beginning stocks of one month are equal to the ending stocks of the previous month.) A positive result (+) would represent a withdrawal from stocks. A negative result (-) would represent a buildup of stocks. For a description of survey forms used to make stock withdrawal or addition calculations, see Explanatory Note 5.

**Unaccounted-for Crude Oil** is a balancing item that represents the difference between crude oil supply and disposition. Crude oil supply is the sum of field production, imports, and stock withdrawals. Crude oil disposition is the sum of exports, refinery input, losses, stock additions, and product supplied. Unaccounted-for crude oil is calcuated by subtracting crude oil supply from crude oil disposition. A positive result indicates that refiners and exporters reported use of more crude oil than was reported to have been available to them. (This occurs, for example, when imports are undercounted due to late reporting or other problems.) A negative result would indicate that more crude oil was reported to have been supplied to refiners and exporters than they reported used.

## Note 3: Domestic Crude Oil Production

Data on crude oil production for States are reported to the Energy Information Administration (EIA) by State government agencies. Data on crude oil production for Federal offshore areas are reported to EIA by the Minerals Management Service of the U. S. Department of the Interior, and the Conservation Committee of California Oil Producers. Currently, all except four of the producing states (Michigan, New York, Ohio, and Pennsylvania) report production data on a monthly basis. These four States report production on an annual basis. Estimates of monthly production for these four States are made by EIA using data reported on Form EIA-182, "Domestic Crude Oil First Purchase Report." After the end of each calendar year, the monthly production estimates are updated using annual reports of the State agencies and the Minerals Management Service.

Table 11 of this publication provides estimates of crude oil production in the latest month for which most State production data are available. There is a time lag of approximately 4 months between the end of the production month and the time when most monthly State crude oil production data become available. In order to present more timely crude oil production estimates, EIA prepares an original, forecasted estimate on the first day of the production month. Approximately 75 days later, this original estimate of monthly crude oil production is replaced by State level interim estimates. The State level interim estimates are based on: (a) data reported by the state (for example, production data for Alaska are typically reported to EIA before the interim estimate is made); (b) first purchase data reported on Form EIA-182; (c) exponential or hyperbolic curve fitted projections based on recent State data; or (d) constant level projections based on the average production rate during a recent time period.

Table B1 is intended to provide further insight into EIA's estimates of monthly U.S. crude oil production. It shows: (a) how the aggregate of reported State data evolves over a period of 18 months; (b) the number of producing States that have not reported production for a given month within that period; and (c) various EIA estimates of monthly crude oil production within that period:

- The original estimate is used in the *Weekly Petroleum Status Report*, and in the *Petroleum Supply Monthly* Tables S1 and S2 until replaced by the interim estimate.
- The interim estimate is used in the *Petroleum Supply Monthly* Tables 1 through 10, and in Tables S1 and S2 until replaced by the final estimate.
- The initial estimate based upon first purchase data collected on Form EIA-182 is used as an estimation tool in

generating the interim estimate. The initial volume represents the best estimate available 40 days after the end of the production month and includes imputation for nonresponse and possible reporting errors. The revised volume is the best estimate available 70 days after the end of the production month and includes imputation as needed. A final revision is published concurrent with publication of EIA-182 price data in the *Petroleum Marketing Annual.*

- The final estimate is published in the *Petroleum Supply Annual.*

## Table B1. U.S. Crude Oil[1] Production Estimates and Reported State[2] Data by Month
(Thousand Barrels per Day)

| Date of Data Availability | Month of Production | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7-87 | 8-87 | 9-87 | 10-87 | 11-87 | 12-87 | 1-88 | 2-88 | 3-88 | 4-88 | 5-88 | 6-88 | 7-88 | 8-88 | 9-88 | 10-88 | 11-88 | 12-88 |
| | Reported State Data[3] | | | | | | | | | | | | | | | | | |
| 8-14-87 | 0 | | | | | | | | | | | | | | | | | |
| 9-14-87 | 1999 | 0 | | | | | | | | | | | | | | | | |
| 10-14-87 | 4264 | 1997 | 0 | | | | | | | | | | | | | | | |
| 11-14-87 | 7276 | 2971 | 1945 | 0 | | | | | | | | | | | | | | |
| 12-14-87 | 7752 | 7724 | 5008 | 2088 | 0 | | | | | | | | | | | | | |
| 1-14-88 | 7756 | 7731 | 7252 | 4866 | 2152 | 0 | | | | | | | | | | | | |
| 2-14-88 | 8095 | 8034 | 8039 | 7703 | 5296 | 2127 | 0 | | | | | | | | | | | |
| 3-14-88 | 8095 | 8071 | 8039 | 8190 | 8205 | 3208 | 2086 | 0 | | | | | | | | | | |
| 4-14-88 | 8133 | 8093 | 8090 | 8249 | 8286 | 8204 | 5111 | 2161 | 0 | | | | | | | | | |
| 5-14-88 | 8251 | 8210 | 8205 | 8365 | 8401 | 8318 | 7156 | 5743 | 2151 | 0 | | | | | | | | |
| 6-14-88 | 8251 | 8210 | 8206 | 8365 | 8403 | 8318 | 8086 | 8103 | 5767 | 2095 | 0 | | | | | | | |
| 7-14-88 | 8251 | 8210 | 8206 | 8365 | 8403 | 8319 | 8079 | 8183 | 7270 | 2686 | 2087 | 0 | | | | | | |
| 8-14-88 | 8256 | 8212 | 8217 | 8379 | 8411 | 8330 | 8134 | 8198 | 8142 | 7188 | 4859 | 2051 | 0 | | | | | |
| 9-14-88 | 8257 | 8212 | 8217 | 8380 | 8412 | 8331 | 8134 | 8240 | 8142 | 8129 | 7968 | 5005 | 2032 | 0 | | | | |
| 10-14-88 | 8261 | 8217 | 8222 | 8384 | 8416 | 8335 | 8134 | 8249 | 8184 | 8131 | 8059 | 7904 | 5083 | 2128 | 0 | | | |
| 11-14-88 | 8261 | 8217 | 8222 | 8384 | 8415 | 8335 | 8134 | 8240 | 8185 | 8134 | 8061 | 7995 | 7710 | 5081 | 2105 | 0 | | |
| 12-14-88 | 8261 | 8217 | 8222 | 8384 | 8416 | 8335 | 8134 | 8241 | 8185 | 8174 | 8099 | 7996 | 7775 | 7808 | 4957 | 2098 | 0 | 0 |
| | Producing States Without Reported Monthly Production[4] | | | | | | | | | | | | | | | | | |
| 12-14-88 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 5 | 5 | 5 | 6 | 7 | 7 | 17 | 28 | 33 | 33 |

| Type of Estimate | Month of Production | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7-87 | 8-87 | 9-87 | 10-87 | 11-87 | 12-87 | 1-88 | 2-88 | 3-88 | 4-88 | 5-88 | 6-88 | 7-88 | 8-88 | 9-88 | 10-88 | 11-88 | 12-88 |
| | Production Estimate | | | | | | | | | | | | | | | | | |
| Original[5] | 8287 | 8204 | 8162 | 8281 | 8283 | 8348 | 8395 | 8353 | 8306 | 8269 | 8240 | 8210 | 8189 | 8128 | 8147 | 8085 | 8026 | 8035 |
| Interim[6] | 8242 | 8190 | 8190 | 8293 | 8330 | 8340 | 8245 | 8376 | 8347 | 8268 | 8203 | 8158 | 8059 | 8063 | 7900 | 7974 | | |
| Form EIA-182 | | | | | | | | | | | | | | | | | | |
| Initial | 8078 | 8022 | 8110 | 8151 | 8162 | 8144 | 8017 | 8239 | 8138 | 8106 | 8009 | 8045 | 7853 | 7895 | 7752 | 7797 | | |
| Revised | 8082 | 8032 | 8084 | 8153 | 8173 | 8180 | 8048 | 8206 | 8134 | 8099 | 8015 | 8044 | 7839 | 7896 | 7755 | | | |
| Final[7] | 8251 | 8210 | 8205 | 8364 | 8397 | 8318 | | | | | | | | | | | | |

[1] Includes lease condensate.

[2] Includes Federal offshore areas, Gulf of Mexico (PAD District III) and Pacific (PAD District V), as two separate reporting entities.

[3] Includes EIA prorated monthly production in 1987 (annual average of 115 thousand barrels per day) for four States (Michigan, New York, Ohio, and Pennsylvania) for which only annual State data are available.

[4] Michigan, New York, Ohio, and Pennsylvania are counted as having monthly reported data in 1987 after their annual reports were received. These data were first reported as of 5-14-88.

[5] Original estimates were made on the first of each month.

[6] Interim estimates were made 44 days after the end of the production month.

[7] Published in the *Petroleum Supply Annual* 1987 DOE/EIA 0340(87)/2.

## Note 4: Disposition

The components of petroleum disposition are crude oil losses, refinery inputs, exports, and products supplied for domestic consumption.

**Crude Oil Losses** is the sum of crude oil losses at refineries reported for all refineries on Form EIA-810, *Monthly Refinery Report.*

**Refinery Inputs** of crude oil, natural gas plant liquids, and other liquids are reported monthly on survey Form EIA-810, *Monthly Refinery Report.* Published inputs of unfinished oils and of motor and aviation gasoline blending components equal refinery input minus refinery output. Refinery inputs of finished petroleum products are reported on a net basis under refinery production.

**Exports** of crude oil and petroleum products are compiled from Census Bureau tabulations EM-522 and EM-594. Exports include crude oil shipments to Puerto Rico, and the Virgin Islands, which are obtained from refinery receipts reported on Form EIA-810, *Monthly Refinery Report,* by refineries located in these places.

**Product Supplied** for each product is calculated by summing field production plus refinery production, plus imports, plus stock withdrawal or minus stock addition, minus crude oil losses (plus net receipts when calculated on a PAD District basis), minus refinery input, minus exports. This formula ensures that total disposition equals total supply.

Product supplied indicates those quantities of petroleum products supplied for domestic consumption. Occasionally, the result for a product is negative because total disposition of the product exceeds total supply. Negative product supplied may occur for a number of reasons: (1) product reclassification has not been reported; (2) data were misreported or reported late; (3) in the case of calculations on a PAD District basis, the figure for net receipts was inaccurate because the coverage of interdistrict movements was incomplete; and (4) products such as gasoline blending components and unfinished oils have entered the primary supply channels with their production net having been reported, e.g., streams returned to refineries from petrochemical plants.

Product supplied for crude oil is the sum of crude oil burned on leases and by pipelines as fuel oil. These data are reported on Form EIA-813, *Monthly Crude Oil Report.* Prior to January 1983, crude oil burned on leases and by pipelines as fuel oil were reported as either distillate or residual fuel oil and included in product supplied for these products.

## Note 5: Stocks

Primary stocks of crude oil are the sum of ending stocks reported monthly on Form EIA-810, *Monthly Refinery Report,* and on Form EIA-813, *Monthly Crude Oil Report.* Crude oil held in the Strategic Petroleum Reserve is included unless otherwise noted. Alaskan crude oil in-transit is also included. Primary stocks of petroleum products are summed from data reported on Form EIA-816, *Monthly Natural Gas Liquids Report*, Form EIA-810, *Monthly Refinery Report*, Form EIA-811, *Monthly Bulk Terminal Report*, and on Form EIA-812, *Monthly Product Pipeline Report.* Primary stocks of petroleum products do not include either secondary stocks held by dealers and jobbers or tertiary stocks held by consumers. For survey descriptions and other details, see Explanatory Note 1.2.

## Note 6: Average Stock Levels

The national inventory (stocks) graphs for total petroleum products, crude oil, motor gasoline, distillate fuel oil, residual oil, and liquefied petroleum gases, in this publication include features to assist in comparing current inventory levels with past inventory levels and minimum operating levels are described below.

The graphs displaying inventory levels of crude oil and petroleum products, crude oil, motor gasoline, distillate fuel oil, residual fuel oil, and liquefied petroleum gases, provide the reader with actual inventory data compared to an *average range* from the most recent 3-year period running from January through December or from July through June. The ranges are updated every six months in April and October. The 3-year period is adjusted by dropping the oldest 6 months and including the most recent 6 months. The ranges also reflect seasonal variation determined from a longer time period. The seasonal factors, which determine the shape of the upper and lower curves, are updated annually in October, using the most recent year's final monthly data.

The monthly seasonal factors are estimated by means of a seasonal adjustment technique developed at the Bureau of the Census (Census X-11). The seasonal factors are assumed to be stable (i.e., unchanging from year to year) and additive (i.e., the series is deseasonalized by subtracting the seasonal factor for the appropriate month from the report inventory levels). The intent of deseasonalization is to remove only annual variation from the data. Thus, a deseasonalized series would contain the same trends, cyclical components, and irregularities as the original data. The seasonal factors for distillate fuel oil, residual fuel oil, and liquefied petroleum gases, were derived using monthly data from 1979-1985.

After seasonal factors are derived, data from the most recent 3-year period (January-December or July-June) are deseasonalized. The average of the deseasonalized 36-month series determines the midpoint of the deseasonalized average band. The standard deviation of the deseasonalized 36-months is calculated adjusting for extreme data points. The upper curve of the average range is defined as the average plus the seasonal factors plus the standard deviation. The lower curve is defined as the average plus the seasonal factors minus the standard deviation. Thus, the width of the *average range* is twice the standard deviation.

## Note 7: Movements

Movements of crude oil between PAD Districts are reported on Form EIA-817, *Monthly Tanker and Barge Movement Report*, and on Form EIA-813, *Monthly Crude Oil Report*. Petroleum product movements are reported on Form EIA-817, *Monthly Tanker and Barge Movement Report*, and EIA-812, *Monthly Product Pipeline Report*. Net receipts is the difference between total movements into and total movements out of each PAD District by pipeline, tanker, and barge. For survey descriptions and other details, see Explanatory Note 1.2.

## Note 8: Preliminary Monthly Statistics

Weekly data (Forms EIA-800, 801, 802, 803, and 804) are used to estimate the most recent monthly values for the "Summary Statistics" section. Since some of the weekly reporting periods overlap two adjacent months, it is necessary to use weighting factors in the calculation of the monthly values.

To estimate crude oil and petroleum product imports, crude oil input to refineries and production of petroleum products for a specific month, the weekly estimates are weighted by the number of days of that month included in each week, then summed.

End-of-month stock levels of crude oil and the major products (motor gasoline, distillate fuel oil, and residual fuel oil) are calculated in a similar manner, but use only the two weekly reporting periods that cover the end-of-week stocks before and after the end of the month. The end-of-month stock level is calculated by first calculating the stock change between the two weeks. The daily stock change between the two end-of-week stock levels is then calculated. This number is multiplied by the weighting factor of the earlier of the two weeks (the week that covers the last day of the month of interest). This change is added to the earlier of the two end-of-week stock levels to estimate the end-of-month stock level.

Preliminary monthly estimates of domestic crude oil production are calculated as described in Explanatory Note 3.

## Note 9: Notes on Tables

**Note 9.1 Crude Oil and Petroleum Products Overview** statistics on the referenced line appear in Table 4 of the "Detailed Statistics," except where noted.

- Crude Oil and Petroleum Products Stock Withdrawal (+) or Addition (-), Petroleum Products Supplied, Total Imports, Crude Oil Imports, Total Exports, and Crude Oil Exports appear as labeled in Table 4. Total Production and Crude Oil Production appear under Field Production in Table 4.
- Natural Gas Plant Production is the sum of Natural Gas Liquids and Finished Petroleum Products Field Production in Table 4.
- Petroleum Products Imports is the sum of Natural Gas Liquids and LRGs, Other Liquids, and Finished Petroleum Products Imports in Table 4.
- Total Crude Oil and Petroleum Products Ending Stocks appear in thousand barrels in Table 2.

**Note 9.2 Crude Oil Supply and Disposition.** statistics on the referenced line appear in Table 1 of the "Detailed Statistics," except where noted.

- Total Domestic Field Production, Alaskan Field Production, SPR Imports, Other Imports (synonymous with Gross Imports Excl. SPR), SPR and Other Primary Stocks Withdrawal (+) or Addition (-), Unaccounted for Crude Oil, Refinery Inputs, and Exports appear as labeled in Table 1.
- Crude Losses and Product Supplied appear as labeled in Table 4.
- SPR Ending Stocks and Other Primary Ending Stocks (synonymous with stocks excluding SPR) appear in thousand barrels in Table 1.
- Total Crude Oil Ending Stocks appear in thousand barrels in Table 2.
- Total Imports appear in Table 4.

**Note 9.3 Finished Motor Gasoline Supply and Disposition** statistics on the referenced line appear in Table 4 of the "Detailed Statistics," except where noted.

- Total Production is the sum of Field Production and Refinery Production in Table 4.

- Imports, Stock Withdrawal (+) or Addition (-), Exports, and Product Supplied appear as labeled in Table 4.

- Unleaded Percent of Total Product Supplied represents the ratio of finished unleaded motor gasoline product supplied to total finished motor gasoline product supplied, multiplied by 100 and rounded to the nearest tenth.

- Ending stocks are aggregated from ending stocks in thousand barrels in Table 2.

**Note 9.4 Distillate and Residual Fuel Oil Supply and Disposition** statistics on the referenced lines appear in Table 4 of the "Detailed Statistics," except where noted.

- Total Production is the sum of Field Production and Refinery Production in Table 4.

- Imports, Stock Withdrawal (+) or Addition (-), Exports, and Product Supplied appear as labeled in Table 4.

- Ending stocks appear in thousand barrels in Table 2.

**Note 9.5 Liquefied Petroleum Gases Supply and Disposition** statistics represent the aggregation of statistics on ethane, ethylene, propane, propylene, butane, butylene, and isobutane. The statistics on the referenced line appear in Table 4 of the "Detailed Statistics," except where noted.

- Total Production is the sum of Field Production and Refinery Production in Table 4.

- Imports, Stocks Withdrawal (+) or Addition (-), Refinery Inputs, Exports, and Product Supplied appear as labeled in Table 4.

- Ending stocks appear in thousand barrels in Table 2.

**Note 9.6 Other Petroleum Products Supply and Disposition** statistics represent the aggregation of statistics on pentanes plus, other liquids, and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil, and liquefied petroleum gases. The statistics on the referenced line are aggregated from Table 4 of the "Detailed Statistics," except where noted.

- Total production is the aggregated sum of Field Production and Refinery Production in Table 4.

- Imports, Stock Withdrawal (+) or Addition (-), Refinery Inputs, Exports, and Product Supplied are aggregated from Table 4.

- Ending stocks are aggregated from ending stocks in thousand barrels in Table 2.

**Note 9.7 Table 1. U.S. Petroleum Balance**

- Lines (1) through (3): Crude oil (including lease condensate) production for *Alaska, Lower 48 States*, and *Total U.S.* are calculated by calling the conservation agency in Alaska for Alaskan crude oil production during the month, estimating crude oil production in the United States (see Explanatory Note 3), and taking the difference to equal production in the Lower 48 States.

- Line (5): *SPR Imports* are reported on survey Form EIA-814.

- Line (12): *Total Other Sources* equals crude oil stock withdrawal (+) or addition (-) plus unaccounted for crude oil minus crude oil losses minus crude oil product supplied in Table 2.

- Line (14): Natural Gas Plant Liquids (NGPL) *Field Production* equals field production of natural gas liquids (NGL) plus field production of finished petroleum products in Table 2.

- Line (15): NGPL *Net Imports* equals the sum of the imports of pentanes plus minus the exports of pentanes plus in Table 2.

- Line (16): NGPL *Stock Withdrawal (+) or Addition (-)* is equal to the stock withdrawal (+) or addition (-) of pentanes plus in Table 2.

- Line (17): *Total NGPL Supply* equals the sum of lines (14), (15), and (16).

- Line (18): Other Liquids *Stock Withdrawal (+) or Addition (-)* equals the aggregate stock withdrawal (+) or addition (-) for other hydrocarbons and alcohol, unfinished oils, motor gasoline blending components, and aviation gasoline blending components in Table 2.

- Line (20): *Other Hydrocarbons and Alcohol New Supply* equals the field production of same in Table 2.

- Line (21): *Refinery Processing Gain* is a balancing item equal to total refinery production minus total refinery input in Table 2.

- Line (23): *Total Other Liquids* equals the sum of lines (18) through (22).

- Line (24): *Total Production of Products* equals crude oil input to refineries plus field production of natural gas

liquids and LRG and finished petroleum products; plus imports of pentanes plus; plus stock withdrawal (+) or addition (-) of pentanes plus; plus stock withdrawal (+) or addition (-) of other liquids; plus imports of other liquids; plus field production of other liquids; plus total refinery production; minus total refinery input; plus crude oil product supplied in Table 2.

- Line (25): *Gross Imports* of Refined Products equals imports of LPG plus imports of finished petroleum products in Table 2.

- Line (26): *Exports* of Refined Products equals exports of LPG plus exports of finished petroleum products in Table 2.

- Line (27): *Net Imports* of Refined Products equals the difference between lines (25) and (26).

- Line (28): *Total New Supply of Products* equals crude oil input to refineries plus field production of natural gas liquids and LRG and finished petroleum products; plus imports of pentanes plus; plus stock withdrawal (+) or addition (-) of pentanes plus; plus stock withdrawal (+) or addition (-) of other liquids; plus imports of other liquids; plus total field production of other liquids; plus total refinery production; minus total refinery input; minus crude oil product supplied plus imports of LPG and finished petroleum products; minus exports of LPG and finished petroleum products in Table 2.

- Line (29): *Refined Products Stock Withdrawal (+) or Addition (-)* equals the sum of stock withdrawal (+) or addition (-) for LPG and finished petroleum products in Table 2.

- Line (30): *Total Petroleum Products Supplied for Domestic Use* equals total products supplied in Table 2.

- Lines (31) through (34): Equal the respective products supplied in Table 2.

- Line (35): *Other Products Supplied* equals the sum of pentanes plus, aviation gasoline, naphtha-type jet fuel, kerosene-type jet fuel, naphtha <400 Deg. F. for petrochemical feedstock use, other oils >400 Deg. F. for petrochemical feedstock use, special naphthas, lubricants, waxes, petroleum coke, asphalt and road oil, still gas, unfinished oils, motor gasoline blending components, aviation gasoline blending components, and miscellaneous products supplied in Table 2.

- Line (37): *Total Product Supplied* is equal to total products supplied in Table 2.

- The sum of lines (38) and (39): Stocks of *Crude Oil and Lease Condensate (Excluding SPR)* and stocks held by the *Strategic Petroleum Reserve* equals ending stocks of crude oil in Table 2.

- Line (43): Stocks of *Finished Refined Products* equals the sum of liquefied petroleum gases and finished petroleum products stocks in Table 2.

## Note 10: New Stock Basis

In January 1975, 1981, and 1983, numerous respondents were added to bulk terminal and pipeline surveys affecting subsequent stocks reported and stock withdrawal calculations. Using the expanded coverage (new basis), the end-of-year stocks, in million barrels, would have been:

- Crude Oil: 1982 - 645 (Total) and 351 (Other Primary).

- Crude Oil and Petroleum Products: 1974 - 1,121; 1980 - 1,425; and 1982 - 1,462.

- Motor Gasoline: 1974 - 225; 1980 - 263; 1982 - 244 (Total) and 203 (Finished).

- Distillate Fuel Oil: 1974 - 224; 1980 - 205; and 1982 - 186.

- Residual Fuel Oil: 1974 - 75; 1980 - 91; and 1982 - 68.

- Liquefied Petroleum Gases: 1974 - 113; 1980 - 128; and 1982 - 103.

- Other Petroleum Products: 1974 - 220; 1980 - 249; and 1982 - 259.

- Stock withdrawal calculations beginning in 1975, 1981, and 1983 were made using new basis stock levels.

In January 1984, changes were made in the reporting of natural gas liquids. As a result, unfractionated stream, which was formerly included in "Other Petroleum Products Supply and Disposition" table in the "Summary Statistics," is now reported on a component basis (ethane, propane, normal butane, isobutane, and pentanes plus). Most of these stocks will now appear in the "Liquefied Petroleum Gases Supply and Disposition" table of the "Summary Statistics." This change will affect stocks reported and stock withdrawals in each table. Under the new basis, end-of-year 1983 stocks, in million barrels, would have been:

- Liquefied Petroleum Gases: 1983 - 108.

- Other Petroleum Products: 1983 - 248.

## Note 11: Stocks of Alaskan Crude Oil

Stocks of Alaskan crude oil in-transit were included for the first time in January 1981. The major impact of this change is on the reporting of stock withdrawal calculations. Using the expanded coverage (new basis), 1980 end-of-year stocks, in million barrels, would have been 488 (Total) and 380 (Other Primary).

## Note 12: 1981 Changes in Petroleum Industry Reporting

Petroleum statistics contained in this report for all years through 1980 were developed using definitions, concepts, reporting procedures, and aggregation methods that are consistent with those developed by the U.S. Bureau of Mines. Research conducted by the Energy Information Administration in 1979 and 1980 indicated that changes had occurred in the petroleum industry that were not being adequately reflected in EIA's reporting system.

EIA reporting forms, definitions, and procedures were modified beginning in January 1981 to describe industry operations more accurately. Unfortunately, empirical information is not available to precisely measure the data shortcomings through 1980. However, estimates of the magnitudes of differences in the major data series are described below to form a basis for comparing 1979, 1980, and 1981 data.

### Motor Gasoline

Prior to 1979, the EIA product-supplied series for motor gasoline was consistently about 2 percent lower than the Federal Highway Administration (FHWA) gasoline-sales data series, which is derived from State tax receipts. The difference increased to about 3 percent in 1979 and 1980. There were two primary causes for this growing difference. First, refinery operations, particularly the flows of unfinished oils and the redesignation of some finished products, were not being accurately described on the EIA survey forms. Second, a large amount of gasoline was being produced away from refineries at "downstream blending stations" to take advantage of provisions in regulations governing the amount of lead that could be added. These blending stations were not reporting gasoline production to the EIA until the data system was changed in January 1981.

Quantitative estimates of the magnitude of the difference in EIA's gasoline product supplied data in 1979 and 1980 have been made by the EIA and the American Petroleum Institute (API). The following table provides 1979 and 1980 data as published in the *Petroleum Statement, Annual*, as well as EIA and API estimates of "recast" motor gasoline product supplied.

EIA recast estimates were based upon preliminary monthly information in the *Monthly Petroleum Statement*. The ranges displayed in the EIA column reflect uncertainty in the estimates. Also shown are the FHWA motor gasoline sales statistics for those years.

### Table B2. Finished Motor Gasoline Product Supplied
(Thousand Barrels per Day)

| | EIA Reported | API Recast | EIA Recast | FHWA[1] |
|---|---|---|---|---|
| 1979 ..... | 7,034 | 7,302 | 7,183-7,347 | 7,258 |
| 1980 ..... | 6,579 | 6,882 | 6,806-6,889 | 6,792 |

[1] FHWA gasoline statistics based on data from Federal Highway Administration, Estimate of Total Gasoline Use, Table MF-21A published October 1980 and September 1981. Aviation gasoline (Table MF-24) has been subtracted from FHWA product supplied quantities to make data comparable.

### Distillate and Residual Fuel Oil

Distillate and residual fuel oil refinery production statistics through 1980 were adjusted to account for an imbalance between unfinished oil supply and disposition. The reported quantities of refinery inputs of unfinished oils typically exceed the available supply of unfinished oils. It has been assumed that this occurs when distillate and residual fuel oils produced by a refinery are shipped to another refinery, where it is treated as unfinished oil. This oil is then reprocessed rather than used or sold as distillate or residual fuel oil.

For many years (including 1980), the difference between unfinished oil disposition and supply was subtracted from distillate and residual fuel oil production to adjust for this discrepancy. Two-thirds of the difference was applied to distillate, and one-third to residual fuel oil.

Beginning in January 1981, this adjustment was discontinued because there was not sufficient empirical evidence to support it. The following table presents distillate and residual fuel oil refinery production in 1979 and 1980 as published (adjusted) and on the same basis as 1981 statistics (unadjusted) to permit comparison.

Adjusted distillate and residual fuel oil product supplied volumes differ from the unadjusted volumes by the same amounts as the adjusted and unadjusted production volumes.

## Table B3. Distillate and Residual Fuel Oil Production and Product Supplied
(Thousand Barrels per Day)

| | Adjusted Refinery Production | Unadjusted Refinery Production | Difference | Unadjusted Product Supplied |
|---|---|---|---|---|
| Distillate Fuel Oil | | | | |
| 1979 ........... | 3,152 | 3,169 | 16 | 3,327 |
| 1980 ........... | 2,661 | 2,764 | 103 | 2,969 |
| Residual Fuel Oil | | | | |
| 1979 ........... | 1,687 | 1,695 | 8 | 2,83 |
| 1980 ........... | 1,580 | 1,634 | 54 | 2,562 |

### Total Petroleum Products

The imbalance between the supply and disposition of unfinished oils and gasoline blending components is included with other products (line 35) in the U.S. Petroleum Balance (Table 1). These imbalances are reported as negative product supplied in the Other Liquids section, Supply and Disposition Statistics (Table 2). Since these changes only involve redistribution of the volumes of gasoline, distillate and residual fuel oil, gasoline blending components, and unfinished oils, the total volume of petroleum products supplied remains unaffected by them.

## Note 13: Natural Gas Liquids Reporting Changes

Beginning in January 1984, a number of changes in the reporting of natural gas liquids (NGL) were implemented. The modified system reflects supply and disposition of NGL on a component, rather than product, basis.

From 1979 to 1983, the EIA collected and reported information on the supply and disposition of nine NGL products. Beginning with January 1984, NGL supply and disposition data were reported on a five component basis (see Table B4) to be consistent with record-keeping practices used by the industry. The following table shows the product category under the new and old basis. Four PSRS surveys were modified beginning in January 1984. They were:

EIA-810 *Monthly Refinery Report*
EIA-811 *Monthly Bulk Terminal Report*
EIA-812 *Monthly Product Pipeline Report*
EIA-816 *Monthly Natural Gas Liquids Report*

A fifth survey, the Form EIA-814, *Monthly Imports Report* (formerly Form ERA-60), was not modified. Adjustments are applied to NGL imports data to make them consistent with the revised reporting system (See Explanatory Note 14).

## Table B4. Product Basis vs. Component Basis Reporting

| | 1984 Component Basis | | | | |
|---|---|---|---|---|---|
| 1979-1983 Product Basis | Ethane | Propane | Normal Butane | Isobutane | Pentanes Plus |
| Ethane | • | | | | |
| Ethane-Propane Mixtures | • | • | | | |
| Propane | | • | | | |
| Butane-Propane Mixtures | | • | • | | |
| Butane | | | • | | |
| Isobutane | | | | • | |
| Unfractionated Stream | • | • | • | • | • |
| Natural Gasoline and Isopentane | | | | | • |
| Plant Condensate | | | | | • |

## Note 14: NGL Import/Export Algorithms

Beginning in January 1984, the Energy Information Administration (EIA) implemented changes in the reporting of natural gas liquids (NGL) supply data, moving from a nine-product slate basis to a five-component slate basis that corresponds to industry record-keeping practices. Changes could not be made to the import and export systems. Therefore, in order to allocate imports and exports of mixed NGL streams to individual component parts, the EIA developed a statistical algorithm.

### Imports

The imports algorithm is based on information gathered from the larger importers of NGL, who were asked to provide component analysis of the products they imported during the first six months of 1983. The percentages shown in the following table are derived from the weighted averages of the data provided by the importers.

### Exports

The export algorithm is based on information gathered from the larger exporters of NGL, who were asked to provide component analysis of the products they exported during 1983. The percentages shown in the following table are derived from the weighted averages of the data provided by the exporters. It was necessary to derive percentages by

## Table B5. Algorithm for Allocating NGL Imports/Exports
(Percent)

| | EIA Component Slate | | | | |
|---|---|---|---|---|---|
| | Ethane | Propane | Normal Butane | Isobutane | Pentanes Plus |
| **Import Product** | | | | | |
| Natural Gasoline An Isopentane (EIA-814) | -- | -- | -- | -- | 100 |
| Plant Condensate (EIA-814) | -- | -- | -- | -- | 100 |
| Ethane (IM-145) | 100 | -- | -- | -- | -- |
| Propane (IM-145) | -- | 100 | -- | -- | -- |
| Butane (IM-145) | -- | -- | 65 | 35 | -- |
| Butane-Propane Mixtures (IM-145) | -- | 40 | 35 | 20 | 5 |
| Ethane-Propane Mixtures (IM-145) | 60 | 40 | -- | -- | -- |
| **Export Product** | | | | | |
| Ethane (All PAD Districts) | 100 | -- | -- | -- | -- |
| Propane (All PAD Districts) | -- | 100 | -- | -- | -- |
| Butane (All PAD Districts) | -- | -- | 100 | -- | -- |
| Mixed Streams | | | | | |
| PAD Districts I, IV, V | -- | 40 | 60 | -- | -- |
| PAD District II | 30 | 25 | 15 | 15 | 15 |
| PAD District III | -- | 80 | 20 | -- | -- |

Petroleum Administration for Defense (PAD) Districts of exportation, due to the wide variation of components included in the mixed streams.

## Note 15: Addition of Crude Oil Pipeline Movements Data

Beginning in January 1985, inter-PAD District pipeline movements of crude oil were included in the PSM. Crude oil pipeline movements are used in the crude oil supply balance at the PAD District level but do not affect National level statistics. As a result of including these movements, *Net Receipts* of crude oil and *Unaccounted for Crude Oil* at the PAD District level changed significantly. Also affected were crude oil imports and unfinished oil imports at the PAD District level which are provided by *PAD District of entry* (Tables 6-10) and by *PAD District of processing* (Tables 16-19).

The tables in the PSM that were changed due to the inclusion of inter-PAD District pipeline movements of crude oil are listed below.

- Tables 6-10, "PAD District I to V, Supply and Disposition of Crude Oil and Petroleum Products." 1985 crude oil imports and unfinished oil imports in Tables 6 through 10 are now reported at the *PAD District of entry* rather than at the *PAD District of processing. Net Receipts* now include movements by pipeline as well as by tanker and barge.

- Table 26, "Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, and Barge Between PAD Districts." The crude oil line includes movements by pipeline as well as by tanker and barge.

- Table 27, "Movements of Crude Oil and Petroleum Products by Pipeline Between PAD Districts." A line was added to report crude oil movements.

- Table 29, "Net Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, and Barge Between PAD Districts." The crude oil line includes net movements by pipeline as well as by tanker and barge.

## Note 16: 1986 Changes in Petroleum Industry Reporting

Beginning in January 1986, several changes to the Petroleum Supply Reporting System (PSRS) went into effect. These changes affected the frame of operators of petroleum facilities required to complete the monthly surveys in the PSRS and resulted in some changes to the tables presented in the *Petroleum Supply Monthly* (PSM).

### Changes in Survey Frames

As a result of frames maintenance activities, 39 respondents were added to the monthly survey frames. The following table shows the impact of the data reported by the new respondents on published data for production and stocks of major petroleum products.

## Table B6. Impact of New Respondents to December 1985 PSM Data

| | Refinery Production (thousand barrels per day) | | Stocks[1] (thousand barrels) | |
|---|---|---|---|---|
| Product | Reported by New Respondents | Published U.S. Total | Reported by New Respondents | Published U.S. Total |
| Leaded Gasoline | 1.3 | 2,326 | 224 | 81,379 |
| Unleaded Gasoline | 0.6 | 4,323 | 276 | 108,422 |
| Distillate Fuel Oil | 0 | 3,174 | 1,217 | 143,911 |
| Residual Fuel Oil | 0 | 1,055 | 1,747 | 50,671 |
| NGL's & LRG's | 0 | 393 | 409 | 80,898 |
| Other Products | 0 | 3,302 | 1,413 | 239,158 |
| Crude Oil (excl. SPR) | -- | -- | 2,314 | 318,695 |

[1] Stocks as of December 31, 1985.

Also, beginning in January 1986, a major integrated petroleum company consolidated production and stocks reporting for some of its facilities. Data previously reported separately on Form EIA-811, *Monthly Bulk Terminal Report*, and on Form EIA-816, *Monthly Natural Gas Liquids Report* for two facilities have been combined with data reported for two refineries on Form EIA-810, *Monthly Refinery Report*. The primary impact of this reporting change is on Table 24, "Stocks of Crude Oil and Petroleum Products by PAD District," which will show a decrease in natural gas liquids (NGL) stocks at bulk terminals and natural gas processing plants, and an increase in NGL stocks at refineries.

### Changes in Publication Tables

Several changes have been made to tables in the PSM either as a direct result of changes in reporting requirements or to improve the usefulness of the publication. These changes are:

- Table 13, "Refinery Input of Crude Oil and Petroleum Products by PAD District"

  -Alaskan crude oil receipts are now shown separately.

- Table 14, "Refinery Production of Petroleum Products by PAD District"

  -The "petrochemical feedstock use" and "other use" are no longer shown separately for still gas or for liquefied refinery gases.

- Tables 16 and 17, "Imports of Crude Oil and Petroleum Products by PAD District"

  -Imports of unfinished oils are now separated into four categories: naphthas and lighter, kerosene and light gas oils, heavy gas oils, and residuum.

- Tables 18 and 19, "Imports of Crude Oil and Petroleum Products by Source"

  -Countries formerly included in the categories "Other Western Hemisphere" and "Other Eastern Hemisphere" are shown individually.

- Table 24, "Stocks of Crude Oil and Petroleum Products by PAD District"

  -The breakout between "petrochemical feedstock use" and "other use" for each liquefied petroleum gas was eliminated.

## Note 17: 1987 Changes in the Petroleum Supply Reporting System

Several changes to the Petroleum Supply Reporting System went into effect at the beginning of January 1987. These changes were made as part of the Energy Information Administration's (EIA's) continuing effort to provide pertinent, timely and consistent energy information.

### Changes in Data Collection and Reporting Systems

- Fresh feed input to catalytic cracking units, hydrocracking units and cokers were added to the Form EIA-810, *Monthly Refinery Report.*

### Changes in Publications

- The "Appalachian No. 2" Refining District has been combined with the "Indiana, Illinois, Kentucky," Refining District. This affects PSM Tables 12-15, 24, 30, and 31.

- Fresh feed inputs to catalytic cracking units, hydrocracking units and cokers are included in Table 13, "Refinery Input of Crude Oil and Petroleum Products by PAD District."

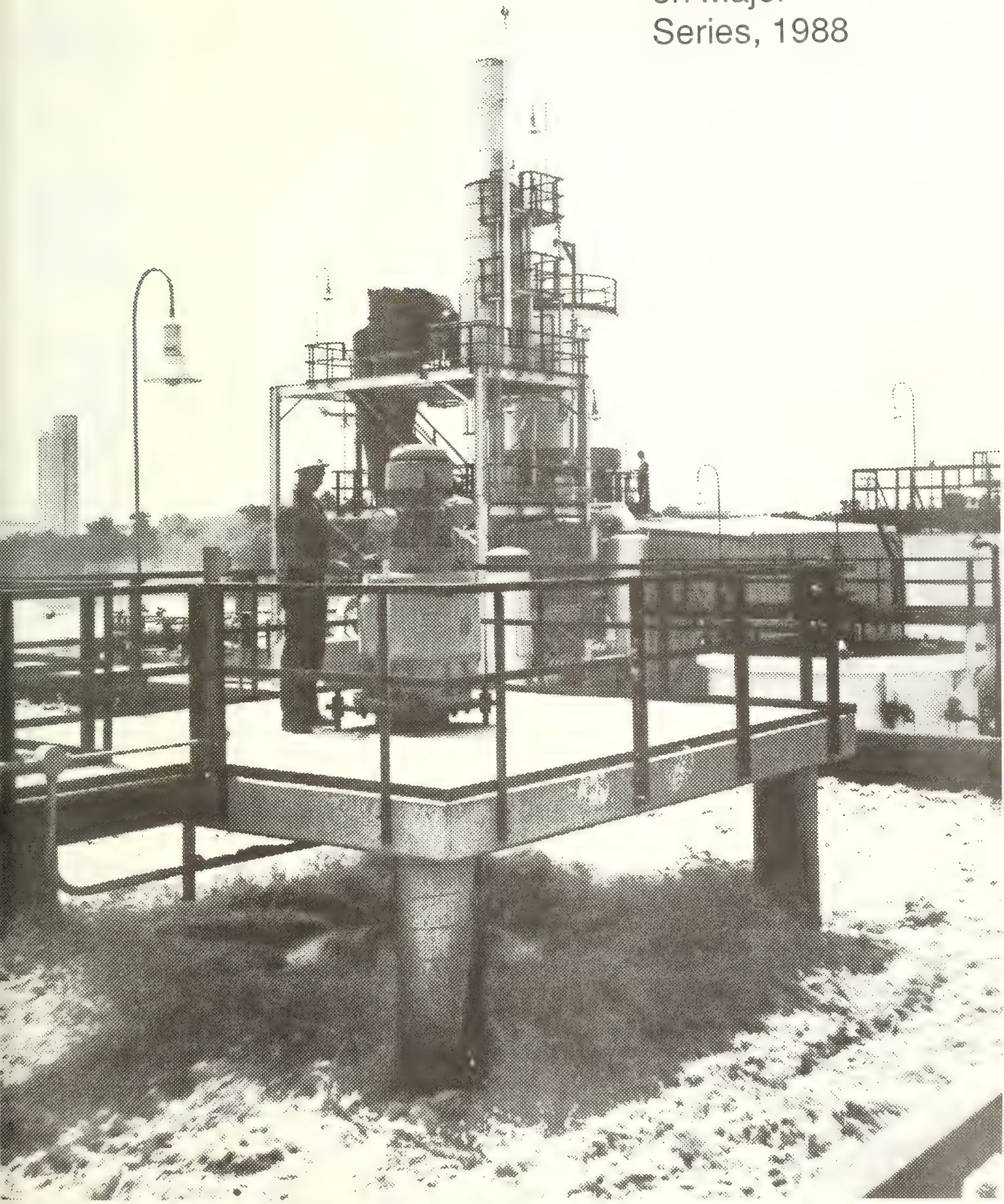
## Clarification

In 1986, several refineries and terminals in the United States applied for Foreign Trade Zone (FTZ) status and applications from three refineries were approved. Consequently, during 1986, some refineries with FTZ status were treated as if they were within the United States while the Hawaiian FTZ was considered outside.

- Effective with the January 1987 data, all Foreign Trade Zone facilities located within the 50 United States are considered domestic entities and are included in statistics in the PSM. The principal differences in the PSM data series are about a 1 percent increase in crude oil imports and a 3 percent decrease in product imports.

# Appendix C

## Impact of Resubmissions on Major Series, 1988



urface aerators are used at U.S. petroleum refineries to help prevent water pollution. These aerators speed up the xidation process by beating air into water.

# Appendix C

## Table C1. Impact of Resubmissions on Major Series, 1988
(Thousand Barrels per Day, Except Where Noted)

| | January | | February | | March | | April | | May | | June | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Product | PSM Value | Difference | PSM Value | Difference | PSM Value | Difference | PSM Value | Difference | PSM Value | Difference | PSM Value | Difference |
| **Inputs** | | | | | | | | | | | | |
| Crude Oil | 12,975 | 2 | 12,715 | -22 | 13,072 | 7 | 13,167 | (s) | 13,472 | -4 | 13,528 | 4 |
| LPG's | 366 | -7 | 336 | 7 | 266 | 2 | 256 | 0 | 253 | 2 | 234 | -1 |
| **Production** | | | | | | | | | | | | |
| LPG's | 1,723 | 8 | 1,757 | 11 | 1,802 | 15 | 1,796 | 8 | 1,809 | 5 | 1,804 | 4 |
| Finished Motor Gasoline | 6,723 | 7 | 6,736 | (s) | 6,695 | 20 | 6,906 | 1 | 6,847 | 3 | 6,983 | 0 |
| Naphtha-Type Jet Fuel | 184 | (s) | 178 | (s) | 209 | 2 | 203 | 0 | 229 | (s) | 208 | 0 |
| Kerosene-Type Jet Fuel | 1,231 | 0 | 1,205 | 0 | 1,243 | -1 | 1,088 | 0 | 1,060 | -1 | 1,133 | 1 |
| Kerosene | 104 | 0 | 118 | (s) | 68 | (s) | 50 | 0 | 48 | 0 | 55 | 0 |
| Distillate Fuel Oil | 3,008 | 1 | 2,683 | -8 | 2,720 | -9 | 2,869 | 0 | 2,931 | 1 | 2,893 | (s) |
| Residual Fuel Oil | 1,009 | (s) | 997 | -5 | 944 | (s) | 951 | -2 | 866 | (s) | 881 | (s) |
| **Imports** | | | | | | | | | | | | |
| Crude Oil | 4,619 | 78 | 4,692 | 49 | 4,788 | 125 | 5,126 | 96 | 5,234 | 165 | 5,055 | 308 |
| Finished Motor Gasoline | 324 | 3 | 365 | 17 | 318 | 8 | 349 | 0 | 415 | 0 | 424 | 0 |
| Naphtha-Type Jet Fuel | 3 | 0 | 3 | 0 | 2 | 0 | 3 | 0 | 4 | 0 | 3 | 0 |
| Kerosene-Type Jet Fuel | 80 | 0 | 64 | 4 | 95 | 0 | 83 | -2 | 101 | 3 | 71 | 4 |
| Distillate Fuel Oil | 355 | 15 | 330 | 9 | 243 | (s) | 208 | 2 | 228 | 9 | 209 | 9 |
| Residual Fuel Oil | 737 | 32 | 792 | 69 | 610 | 23 | 465 | 19 | 423 | (s) | 349 | -27 |
| Other Products | 556 | 7 | 503 | 11 | 506 | 16 | 611 | 16 | 647 | 1 | 629 | 18 |
| **Stocks** (Thousand Barrels) | | | | | | | | | | | | |
| Crude Oil | 345,479 | 99 | 347,835 | 180 | 353,625 | 339 | 357,131 | 241 | 357,724 | 1,937 | 359,001 | -148 |
| Unfinished Oils | 95,338 | 65 | 97,786 | 49 | 102,134 | -7 | 102,847 | -4 | 112,069 | -120 | 114,952 | -8 |
| LPG's | 80,741 | -1,254 | 70,191 | 224 | 68,808 | 130 | 79,671 | 6 | 89,992 | 246 | 99,988 | 57 |
| Total Motor Gasoline | 239,464 | 8 | 240,661 | -67 | 231,258 | -84 | 225,956 | 220 | 225,644 | 8 | 208,969 | 423 |
| Naphtha-Type Jet Fuel | 8,366 | -760 | 6,731 | -681 | 7,156 | -524 | 6,713 | -442 | 7,397 | -568 | 6,750 | -13 |
| Kerosene-Type Jet Fuel | 37,912 | 44 | 36,889 | -27 | 39,548 | -43 | 39,270 | -60 | 39,392 | 64 | 38,990 | 25 |
| Distillate Fuel Oil | 127,155 | 205 | 109,640 | -58 | 89,312 | -195 | 94,290 | -176 | 104,452 | -463 | 110,662 | -436 |
| Residual Fuel Oil | 46,628 | -3 | 45,465 | 95 | 44,057 | 102 | 43,245 | 5 | 45,746 | 651 | 42,123 | 82 |
| **Product Supplied** | | | | | | | | | | | | |
| LPG's | 2,069 | 55 | 1,982 | -49 | 1,710 | 16 | 1,339 | 12 | 1,350 | -5 | 1,343 | 11 |
| Finished Motor Gasoline | 6,679 | 11 | 7,004 | 18 | 7,265 | 28 | 7,384 | -7 | 7,269 | 10 | 7,838 | -17 |
| Naphtha-Type Jet Fuel | 173 | 25 | 237 | -3 | 197 | -3 | 221 | -3 | 208 | 4 | 233 | -19 |
| Kerosene-Type Jet Fuel | 1,360 | -1 | 1,270 | 7 | 1,200 | (s) | 1,167 | -2 | 1,153 | -1 | 1,202 | 6 |
| Distillate Fuel Oil | 3,517 | 10 | 3,511 | 11 | 3,544 | -4 | 2,870 | 1 | 2,757 | 19 | 2,820 | 8 |
| Residual Fuel Oil | 1,578 | 33 | 1,601 | 60 | 1,434 | 23 | 1,272 | 20 | 945 | -20 | 1,102 | -8 |
| Major Products Supplied | 15,376 | 132 | 15,605 | 45 | 15,350 | 59 | 14,253 | 21 | 13,682 | 6 | 14,538 | -19 |

Note: Volumes indicate cumulative changes resulting from resubmissions received for that month as of the date of this publication.
(s) = Less than 500 barrels per day.

This table contains information on revisions to published statistics caused by resubmission of respondent survey forms. The table shows the published value in the *Petroleum Supply Monthly* (PSM) and the cumulative difference resulting from resubmissions for the major product series. The official published petroleum supply statistics are not changed to reflect revisions until publication of the *Petroleum Supply Annual* (PSA), except in cases of catastrophic error.

This table is provided as a service to analysts who need to know the latest available statistics. It should be used with caution because resubmissions are received on an irregular basis and the impact on published data can change from month to month. In some cases, the pattern of revision caused by resubmissions during the year is a poor indicator of final statistics that will be published in the PSA.

## Table C1. Impact of Resubmissions on Major Series, 1988 (Continued)
(Thousand Barrels per Day, Except Where Noted)

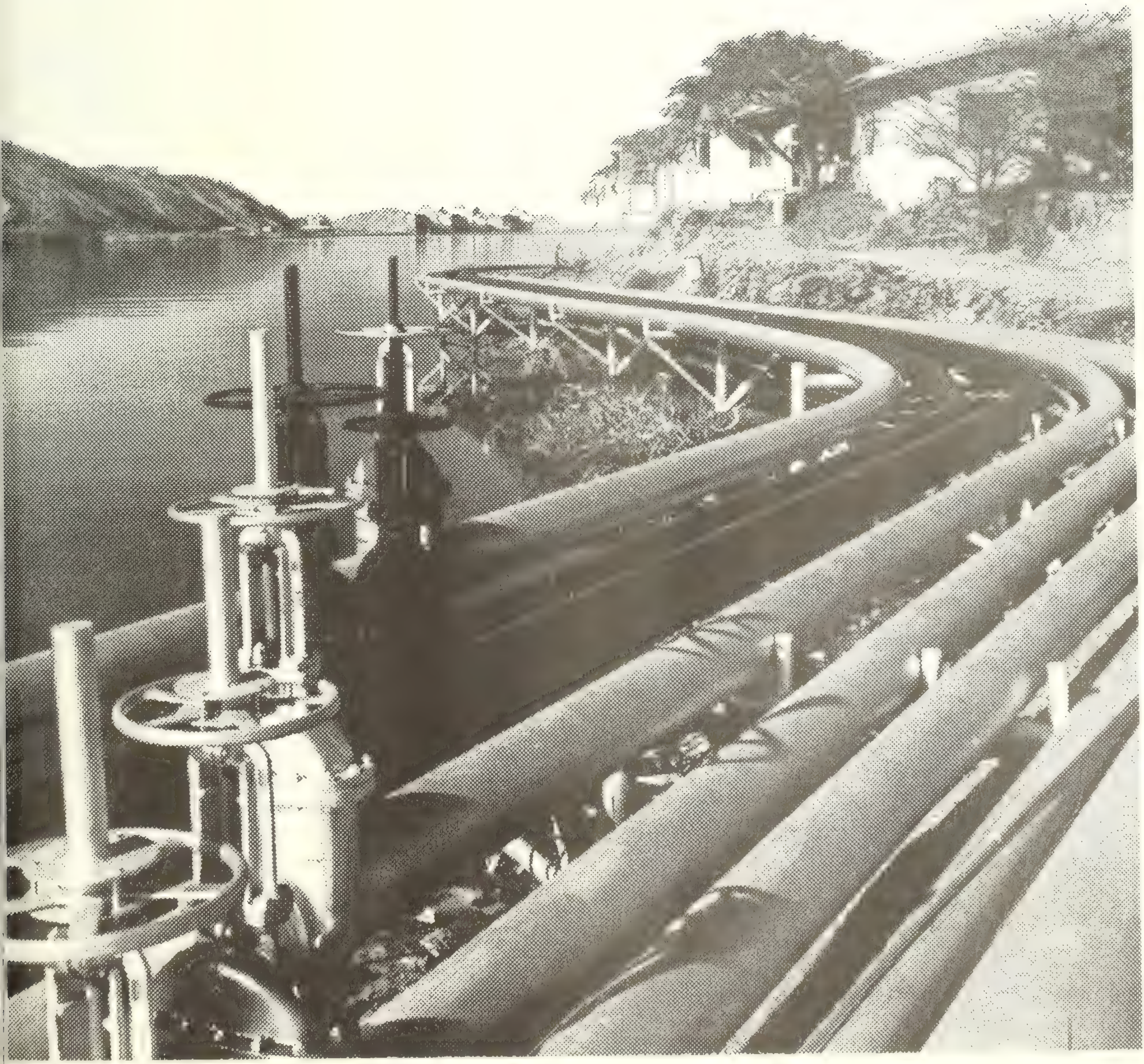
| | July | | August | | September | | October | | November | | December | | Year to Date |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Product | PSM Value | Difference | PSM Value | Difference | PSM Value | Difference | PSM Value | Difference | PSM Value | Difference | PSM Value | Difference | Avg Difference |
| **Inputs** | | | | | | | | | | | | | |
| Crude Oil | 13,663 | 1 | 13,797 | -2 | -- | -- | -- | -- | -- | -- | -- | -- | -1 |
| LPG's | 228 | 0 | 241 | (s) | -- | -- | -- | -- | -- | -- | -- | -- | 0 |
| **Production** | | | | | | | | | | | | | |
| LPG's | 1,831 | (s) | 1,848 | -4 | -- | -- | -- | -- | -- | -- | -- | -- | 5 |
| Finished Motor Gasoline | 7,159 | 0 | 7,204 | 5 | -- | -- | -- | -- | -- | -- | -- | -- | 4 |
| Naphtha-Type Jet Fuel | 209 | (s) | 206 | 0 | -- | -- | -- | -- | -- | -- | -- | -- | (s) |
| Kerosene-Type Jet Fuel | 1,155 | (s) | 1,138 | 0 | -- | -- | -- | -- | -- | -- | -- | -- | (s) |
| Kerosene | 64 | 0 | 81 | 0 | -- | -- | -- | -- | -- | -- | -- | -- | (s) |
| Distillate Fuel Oil | 2,783 | 1 | 2,844 | 4 | -- | -- | -- | -- | -- | -- | -- | -- | -1 |
| Residual Fuel Oil | 913 | (s) | 863 | 2 | -- | -- | -- | -- | -- | -- | -- | -- | -0 |
| **Imports** | | | | | | | | | | | | | |
| Crude Oil | 5,006 | 175 | 5,039 | 80 | -- | -- | -- | -- | -- | -- | -- | -- | 134 |
| Finished Motor Gasoline | 461 | 2 | 465 | 12 | -- | -- | -- | -- | -- | -- | -- | -- | 5 |
| Naphtha-Type Jet Fuel | 3 | 0 | 3 | 0 | -- | -- | -- | -- | -- | -- | -- | -- | 0 |
| Kerosene-Type Jet Fuel | 78 | 0 | 100 | 0 | -- | -- | -- | -- | -- | -- | -- | -- | 1 |
| Distillate Fuel Oil | 205 | 2 | 270 | 9 | -- | -- | -- | -- | -- | -- | -- | -- | 6 |
| Residual Fuel Oil | 436 | 34 | 515 | 17 | -- | -- | -- | -- | -- | -- | -- | -- | 20 |
| Other Products | 571 | 38 | 541 | -11 | -- | -- | -- | -- | -- | -- | -- | -- | 12 |
| **Stocks (Thousand Barrels)** | | | | | | | | | | | | | |
| Crude Oil | 349,330 | 184 | 333,170 | 389 | -- | -- | -- | -- | -- | -- | -- | -- | 402 |
| Unfinished Oils | 113,600 | 367 | 111,078 | 262 | -- | -- | -- | -- | -- | -- | -- | -- | 75 |
| LPG's | 111,906 | -3 | 120,611 | 255 | -- | -- | -- | -- | -- | -- | -- | -- | -42 |
| Total Motor Gasoline | 213,757 | 1,241 | 218,602 | 861 | -- | -- | -- | -- | -- | -- | -- | -- | 326 |
| Naphtha-Type Jet Fuel | 6,710 | 1 | 6,861 | 0 | -- | -- | -- | -- | -- | -- | -- | -- | -373 |
| Kerosene-Type Jet Fuel | 40,297 | 18 | 39,971 | 52 | -- | -- | -- | -- | -- | -- | -- | -- | 9 |
| Distillate Fuel Oil | 119,434 | 151 | 125,185 | 232 | -- | -- | -- | -- | -- | -- | -- | -- | -92 |
| Residual Fuel Oil | 41,072 | 105 | 37,840 | 227 | -- | -- | -- | -- | -- | -- | -- | -- | 158 |
| **Product Supplied** | | | | | | | | | | | | | |
| LPG's | 1,416 | 2 | 1,517 | -13 | -- | -- | -- | -- | -- | -- | -- | -- | 3 |
| Finished Motor Gasoline | 7,473 | -23 | 7,511 | 40 | -- | -- | -- | -- | -- | -- | -- | -- | 7 |
| Naphtha-Type Jet Fuel | 213 | (s) | 204 | (s) | -- | -- | -- | -- | -- | -- | -- | -- | (s) |
| Kerosene-Type Jet Fuel | 1,187 | (s) | 1,234 | -1 | -- | -- | -- | -- | -- | -- | -- | -- | 0 |
| Distillate Fuel Oil | 2,647 | -16 | 2,860 | 10 | -- | -- | -- | -- | -- | -- | -- | -- | 4 |
| Residual Fuel Oil | 1,177 | 33 | 1,258 | 16 | -- | -- | -- | -- | -- | -- | -- | -- | 19 |
| Major Products Supplied | 14,113 | -4 | 14,584 | 52 | -- | -- | -- | -- | -- | -- | -- | -- | 36 |

Note: Volumes indicate cumulative changes resulting from resubmissions received for that month as of the date of this publication.
(s) = Less than 500 barrels per day.

This table contains information on revisions to published statistics caused by resubmission of respondent survey forms. The table shows the published value in the *Petroleum Supply Monthly* (PSM) and the cumulative difference resulting from resubmissions for the major product series. The official published petroleum supply statistics are not changed to reflect revisions until publication of the *Petroleum Supply Annual* (PSA), except in cases of catastrophic error.

This table is provided as a service to analysts who need to know the latest available statistics. It should be used with caution because resubmissions are received on an irregular basis and the impact on published data can change from month to month. In some cases, the pattern of revision caused by resubmissions during the year is a poor indicator of final statistics that will be published in the PSA.

# Glossary



ipelines carry crude oil and petroleum products between refineries and ports.

# Definitions of Petroleum Products and Other Terms

***Alcohol.*** The family name of a group of organic chemical compounds composed of carbon, hydrogen, and oxygen. The series of molecules vary in chain length and are composed of a hydrocarbon plus a hydroxyl group; CH-(CH)n-OH (e.g., methanol, ethanol, and tertiary butyl alcohol (TBA)).

***Alkylation.*** A refining process for chemically combining isobutane with olefin hydrocarbons (e.g., propylene, butylene) through the control of temperature and pressure in the presence of an acid catalyst, usually sulfuric acid or hydrofluoric acid. The product, alkylate, an isoparaffin, has high octane value and is blended with motor and aviation gasoline to improve the antiknock value of the fuel.

***API Gravity.*** An arbitrary scale expressing the gravity or density of liquid petroleum products. The measuring scale is calibrated in terms of degrees API; it may be calculated in terms of the following formula:

$$\text{Degrees API} = \frac{141.5}{sp.gr.60\,^{\circ}F/60\,^{\circ}F} - 131.5$$

***Aromatics.*** Hydrocarbons characterized by unsaturated ring structures of carbon atoms. Commercial petroleum aromatics are benzene, toluene, and xylene (BTX).

***Asphalt.*** A dark-brown-to-black cement-like material containing bitumens as the predominant constituents, obtained by petroleum processing. The definition includes crude asphalt as well as the following finished products: cements, fluxes, the asphalt content of emulsions (exclusive of water), and petroleum distillates blended with asphalt to make cutback asphalts. The conversion factor for asphalt is 5.5 barrels of 42 U.S. gallons per short ton.

***ASTM.*** The acronym for the American Society for Testing and Materials.

***Aviation Gasoline (Finished).*** All special grades of gasoline for use in aviation reciprocating engines, as given in ASTM Specification D910 and Military Specification MIL-G-5572. Excludes blending components which will be used in blending or compounding into finished aviation gasoline.

***Aviation Gasoline Blending Components.*** Naphthas which will be used for blending or compounding into finished aviation gasoline (e.g., straight-run gasoline, alkylate, and reformate). Excludes oxygenates (alcohols, ethers), butane, and pentanes plus.

***Barrel.*** A volumetric unit of measure for crude oil and petroleum products equivalent to 42 U.S. gallons. This measure is used in most statistical reports. Factors for converting petroleum coke, asphalt, still gas and wax to barrels are given in the definitions of these products.

***Barrels Per Calendar Day.*** The maximum number of barrels of input that can be processed during a 24-hour period after making allowances for the following limitations:

> the capability of downstream facilities to absorb the output of crude oil processing facilities of a given refinery. No reduction is made when a planned distribution of intermediate streams through other than downstream facilities is part of a refinery's normal operation;
>
> the types and grades of inputs to be processed;
>
> the types and grades of products expected to be manufactured;
>
> the environmental constraints associated with refinery operations;
>
> the reduction of capacity for scheduled downtime such as routine inspection, mechanical problems, maintenance, repairs, and turnaround; and
>
> the reduction of capacity for unscheduled downtime such as mechanical problems, repairs, and slowdowns.

***Barrels Per Stream Day.*** The amount a unit can process running at full capacity under optimal crude oil and product slate conditions.

***Benzene.*** An aromatic hydrocarbon, (C6H6), present to a minor degree in most crude oils. Some important products manufactured from benzene are: styrene, phenol, nylon, aniline, and synthetic detergents.

*Butane.* A normally gaseous straight-chain or branch-chain hydrocarbon, ($C_4H_{10}$). It is extracted from natural gas or refinery gas streams. It includes isobutane and normal butane and is designated in ASTM Specification D1835 and Gas Processors Association Specifications for commercial butane.

*Isobutane.* A normally gaseous branch-chain hydrocarbon, ($C_4H_{10}$). It is a colorless paraffinic gas that boils at a temperature of 10.9 degrees F. It is extracted from natural gas or refinery gas streams.

*Normal Butane.* A normally gaseous straight-chain hydrocarbon, ($C_4H_{10}$). It is a colorless paraffinic gas that boils at a temperature of 31.1 degrees F. It is extracted from natural gas or refinery gas streams.

*Butylene.* An olefinic hydrocarbon, ($C_4H_8$), recovered from refinery processes.

*Catalytic Cracking.* The refining process of breaking down the larger, heavier, and more complex hydrocarbon molecules into simpler and lighter molecules. Catalytic cracking is accomplished by the use of a catalytic agent and is an effective process for increasing the yield of gasoline from crude oil. Catalytic cracking processes fresh feeds and recycled feeds.

*Fresh Feeds.* Crude oil or petroleum distillates which are being fed to processing units for the first time.

*Recycled Feeds.* Feeds that are continuously fed back for additional processing.

*Catalytic Hydrocracking.* A refining process that uses hydrogen and catalysts with relatively low temperatures and high pressures for converting middle boiling or residual material to high-octane gasoline, reformer charge stock, jet fuel and/or high grade fuel oil. The process uses one or more catalysts, depending upon product output, and can handle high sulfur feedstocks without prior desulfurization.

*Catalytic Hydrotreating.* A refining process for treating petroleum fractions from atmospheric or vacuum distillation units (e.g., naphthas, middle distillates, reformer feeds, residual fuel oil, and heavy gas oil) and other petroleum (e.g., cat cracked naphtha, coker naphtha, gas oil, etc.) in the presence of catalysts and substantial quantities of hydrogen. Hydrotreating includes desulfurization, removal of substances (e.g., nitrogen compounds) that deactivate catalysts, conversion of olefins to paraffins to reduce gum formation in gasoline, and other processes to upgrade the quality of the fractions.

*Catalytic Reforming.* A refining process using controlled heat and pressure with catalysts to rearrange certain hydrocarbon molecules, thereby converting paraffinic and naphthenic type hydrocarbons (e.g., low-octane gasoline boiling range fractions) into petrochemical feedstocks and higher octane stocks suitable for blending into finished gasoline. Catalytic reforming is reported in two categories. They are:

*Low Pressure.* A processing unit operating at less than 225 pounds per square inch gauge (PSIG) measured at the outlet separator.

*High Pressure.* A processing unit operating at either equal to or greater than 225 pounds per square inch gauge (PSIG) measured at the outlet separator.

*Charge Capacity.* The input (feed) capacity of the refinery processing facilities.

*Coal.* A generic term applied to carbonaceous rocks that were formed by the partial or complete decomposition of vegetation. These stratified carbonaceous rocks are either solid or brittle and are highly combustible. Includes lignite, bituminous coal, and anthracite which conform to ASTM Specification D388.

*Crude Distillation.* The refining process of separating crude oil components at atmospheric pressure by heating to temperatures of about 600 degrees F to 750 degrees F (depending on the nature of the crude oil and desired products) and subsequent condensing of the fractions by cooling.

*Crude Oil (including Lease Condensate).* A mixture of hydrocarbons that existed in liquid phase in underground reservoirs and remains liquid at atmospheric pressure after passing through surface-separating facilities. Included are lease condensate and liquid hydrocarbons produced from tar sands, gilsonite, and oil shale. Drip gases are also included, but topped crude oil (residual oil) and other unfinished oils are excluded. Liquids produced at natural gas processing plants and mixed with crude oil are likewise excluded where identifiable. Crude oil is considered as either domestic or foreign, according to the following:

*Domestic.* Crude oil produced in the United States or from its "outer continental shelf" as defined in 43 USC 1331.

*Foreign.* Crude oil produced outside the United States. Imported Athabasca hydrocarbons are included.

***Delayed Coking.*** A process by which heavier crude oil fractions can be thermally decomposed under conditions of elevated temperatures and pressure to produce a mixture of lighter oils and petroleum coke. The light oils can be processed further in other refinery units to meet product specifications. The coke can be used either as a fuel or in other applications such as the manufacturing of steel or aluminum.

***Distillate Fuel Oil.*** A general classification for one of the petroleum fractions produced in conventional distillation operations. It is used primarily for space heating, on-and-off-highway diesel engine fuel including railroad engine fuel and fuel for agricultural machinery), and electric power generation. Included are products known as No. 1, No. 2, and No. 4 fuel oils; No. 1, No. 2, and No. 4 diesel fuels.

> ***No. 1 Fuel Oil .*** A light distillate fuel oil intended for use in vaporizing pot-type burners. ASTM Specification D396 specifies for this grade maximum distillation temperatures of 400 degrees F at the 10-percent recovery point and 550 degrees F at the 90-percent point, and kinematic viscosities between 1.4 and 2.2 centistokes at 100 degrees F.
>
> ***No. 2 Fuel Oil.*** A distillate fuel oil for use in atomizing-type burners for domestic heating or for moderate capacity commercial-industrial burner units. ASTM Specification D396 designates minimum and maximum distillation temperatures at the 90-percent recovery point of 540 degrees F and 640 degrees F, and kinematic viscosities between 2.0 and 3.6 centistokes at 100 degrees F.
>
> ***No. 1 and No. 2 Diesel Fuel Oils.*** Distillate fuel oils used in compression-ignition engines, as designated in the ASTM Specification D975:
>
>> ***No. 1-D.*** A volatile distillate fuel oil with a maximum distillation temperature of 550 degrees F at the 90-percent recovery point for use in high-speed diesel engines generally operated under variations in speed and load. Includes type C-B diesel fuel used for city buses and similar operations. Properties are defined in ASTM Specification D975.
>>
>> ***No. 2-D.*** A gas oil type distillate of lower volatility with minimum and maximum distillation temperatures at the 90-percent recovery point of 540 and 640 degrees F for use in high-speed diesel engines generally operated under uniform speed and load conditions. Includes Type R-R diesel fuel used for railroad locomotive engines, and Type T-T for diesel-engine trucks. Properties are defined in ASTM Specification D975.
>
> ***No. 4 Fuel Oil.*** A fuel oil for commercial burner installations not equipped with preheating facilities. It is used extensively in industrial plants. This grade is a blend of distillate fuel oil and residual fuel oil stocks that conforms to ASTM Specification D396 or Federal Specification VV-F-815C; with minimum and maximum kinematic viscosities between 5.8 and 26.4 centistokes at 100 degrees F. Also included is No. 4-D, a fuel oil for low and medium-speed diesel engines that conforms to ASTM Specification D975.

***Eastern Hemisphere.*** That half of the earth east of the Atlantic Ocean which includes Europe, Asia, Africa and Australia. The Hawaiian Foreign Trade Zone is in this hemisphere.

***Electricity (Purchased).*** Electricity purchased for refinery operations that is not produced within the refinery complex.

***Ethane.*** A normally gaseous straight-chain hydrocarbon, ($C_2H_6$). It is a colorless paraffinic gas that boils at a temperature of -127.48 degrees F. It is extracted from natural gas and refinery gas streams.

***Ether.*** A generic term applied to a group of organic chemical compounds composed of carbon, hydrogen, and oxygen, characterized by an oxygen atom attached to two carbon atoms (e.g., methyl tertiary butyl ether).

***Ethylene.*** An olefinic hydrocarbon, ($C_2H_4$), recovered from refinery processes or petrochemical processes.

***Exports.*** Shipments of goods from the 50 States and the District of Columbia to foreign countries, Puerto Rico, the Virgin Islands and other U.S. possessions and territories.

***Field Production.*** Represents crude oil production on leases, natural gas liquids production at natural gas processing plants, and new supply of other hydrocarbons and alcohol.

***Flexicoking.*** A thermal cracking process which converts heavy hydrocarbons such as crude oil, tar sands bitumen, and distillation residues into light hydrocarbons. Feedstocks can be any pumpable hydrocarbons including those containing high concentrations of sulfur and metals.

***Fluid Coking.*** A thermal cracking process utilizing the fluidized-solids technique to remove carbon (coke) for continuous conversion of heavy, low-grade oils into lighter products.

***Fuels Solvent Deasphalting.*** A refining process for removing asphalt compounds from petroleum fractions, such as reduced crude oil. The recovered stream from this process is used to produce fuel products.

***Gas Oil.*** A liquid petroleum distillate having a viscosity intermediate between that of kerosene and lubricating oil. It derives its name from having originally been used in the manufacture of illuminating gas. It is now used to produce distillate fuel oils and gasoline.

***Gasohol. See Motor Gasoline (Finished).***

***Gasoline Blending Components.*** Naphthas which will be used for blending or compounding into finished aviation or motor gasoline (e.g., straight-run gasoline, alkylate, and reformate). Excludes oxygenates (alcohols, ethers), butane, and pentanes plus.

***Heavy Gas Oil.*** Petroleum distillates with an approximate boiling range from 651 degrees F to 1000 degrees F.

***Hydrogen.*** The lightest of all gases, occurring chiefly in combination with oxygen in water; also in acids, bases, alcohols, petroleum, and other hydrocarbons.

***Idle Capacity.*** The component of operable capacity that is not in operation and not under active repair, but capable of being placed in operation within 30 days; and capacity not in operation but under active repair that can be completed within 90 days.

***Imported Crude Oil Burned As Fuel.*** The amount of foreign crude oil burned as a fuel oil, usually as residual fuel oil, without being processed as such. Imported crude oil burned as fuel includes lease condensate and liquid hydrocarbons produced from tar sand oil, gilsonite, and shale oil.

***Imports.*** Receipts of goods into the 50 States and the District of Columbia from foreign countries, Puerto Rico, the Virgin Islands, and other U.S. possessions and territories.

***Isobutane. See Butane.***

***Isohexane.*** A saturated branch-chain hydrocarbon, ($C_6H_{14}$). It is a colorless liquid that boils at a temperature of 156.2 degrees F.

***Isomerization.*** A refining process which alters the fundamental arrangement of atoms in the molecule without adding or removing anything from the original material. Used to convert normal butane into isobutane, (C4), an alkylation process feedstock, and normal pentane and hexane into isopentane, (C5), and isohexane, (C6), high-octane gasoline components.

***Isopentane. See Natural Gasoline and Isopentane.***

***Kerosene.*** A petroleum distillate that has a maximum distillation temperature of 401 degrees F at the 10-percent recovery point, a final boiling point of 572 degrees F, and a minimum flash point of 100 degrees F. Included are the two grades designated in ASTM D3699: No. 1-K and No. 2-K, and all grades of kerosene called range or stove oil. Kerosene is used in space heaters, cook stoves, and water heaters and is suitable for use as an illuminant when burned in wick lamps.

***Kerosene-type Jet Fuel.*** A quality kerosene product with a maximum distillation temperature of 400 degrees F at the 10-percent recovery point and a final maximum boiling point of 572 degrees F. The fuel is designated in ASTM Specification D1655 and Military Specification MIL-T-5624L (Grades JP-5 and JP-8). A relatively low-freezing point distillate of the kerosene type used primarily for commercial turbojet and turboprop aircraft engines.

***Lease Condensate.*** A natural gas liquid recovered from gas well gas (associated and non-associated) in lease separators or natural gas field facilities. Lease condensate consists primarily of pentanes and heavier hydrocarbons.

***Light Gas Oils.*** Liquid petroleum distillates heavier than naphtha, with an approximate boiling range from 401 degrees F to 650 degrees F.

***Liquefied Petroleum Gases (LPG).*** Ethane, ethylene, propane, propylene, normal butane, butylene, and isobutane produced at refineries or natural gas processing plants, including plants that fractionate raw natural gas plant liquids.

***Liquefied Refinery Gases (LRG).*** Liquefied petroleum gases fractionated from refinery or still gases. Through compression and/or refrigeration, they are retained in the liquid state. The reported categories are ethane/ethylene, propane/propylene, normal butane butylene, and isobutane. Excludes still gas.

***Lubricating Oils.*** A substance used to reduce friction between bearing surfaces. Petroleum lubricants may be produced either from distillates or residues. Other substances may be added to impart or improve certain required properties. Do not include byproducts of lubricating oil refining such as aromatic extracts derived from solvent extraction or tars derived from deasphalting. "Lubricants"

includes all grades of lubricating oils from spindle oil to cylinder oil and those used in greases. The three categories include:

> *Bright Stock.* A refined, high viscosity lubricating oil base stock that is usually made from a residuum by a treatment such as deasphalting, acid treatment, or solvent extraction.
>
> *Neutral.* A distillate lubricating oil base stock with a viscosity that is usually not above 550 Saybolt Universal Seconds (SUS) at 100 degrees F. A product of hydrotreating, acid treatment, or solvent extraction.
>
> *Other.* A lubricating oil base stock used in finished lubricating oils and greases, including black, coastal, and red oils.

*Middle Distillates.* A general classification that includes distillate fuel oil and kerosene.

*Miscellaneous Products.* Includes all finished products not classified elsewhere (e.g., petrolatum, lube refining byproducts (aromatic extracts and tars), absorption oils, ram-jet fuel, petroleum rocket fuels, synthetic natural gas feedstocks, speciality oils, and medicinal oils).

*Motor Gasoline (Finished).* A complex mixture of relatively volatile hydrocarbons, with or without small quantities of additives, that have been blended to form a fuel suitable for use in spark-ignition engines. Motor gasoline, as given in ASTM Specification D439 or Federal Specification VV-G-1690B, include a range in distillation temperatures from 122 to 158 degrees F at the 10-percent recovery point and from 365 to 374 degrees F at the 90-percent recovery point. The Reid Vapor Pressure ranges from 9 to 15 psi. "Motor gasoline" includes finished leaded gasoline, finished unleaded gasoline, and gasohol. Blendstock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

> *Finished Leaded Gasoline.* Contains more than 0.05 gram of lead per gallon or more than 0.005 gram of phosphorus per gallon. Premium and regular grades are included, depending on the octane rating. Includes leaded gasohol. Blendstock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.
>
> *Finished Unleaded Gasoline.* Contains not more than 0.05 gram of lead per gallon and not more than 0.005 gram of phosphorus per gallon. Premium and regular grades are included, depending on the octane rating. Includes unleaded gasohol. Blendstock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.
>
> *Gasohol.* A blend of finished motor gasoline (leaded or unleaded) and alcohol (generally ethanol but sometimes methanol), limited to 10 percent by volume of alcohol.

*Motor Gasoline Blending Components.* Naphthas which will be used for blending or compounding into finished motor gasoline (e.g. straight-run gasoline, alkylate, and reformate). Excludes oxygenates (alcohols, ethers), butane, and pentanes plus.

*Naphtha.* A generic term applied to a petroleum fraction with an approximate boiling range between 122 and 400 degrees F.

*Naphtha-type Jet Fuel.* A fuel in the heavy naphtha boiling range. ASTM Specification D1655 specifies for this fuel maximum distillation temperatures of 290 degrees F at the 20-percent recovery point and 470 degrees F at the 90-percent point, meeting Military Specification MIL-T-5624L (Grade JP-4). JP-4 is used for turbojet and turboprop aircraft engines, primarily by the military. Excludes ram-jet and petroleum rocket fuels.

*Natural Gas.* A mixture of hydrocarbons and small quantities of various nonhydrocarbons existing in the gaseous phase or in solution with crude oil in underground reservoirs.

*Natural Gas Field Facility.* A field facility designed to process natural gas produced from more than one lease for the purpose of recovering condensate from a stream of natural gas; however, some field facilities are designed to recover propane, normal butane, pentanes plus, etc., and to control the quality of natural gas to be marketed.

*Natural Gas Plant Liquids.* Natural gas liquids recovered from natural gas in gas processing plants, and in some situations, from natural gas field facilities. Natural gas liquids extracted by fractionators are also included. These liquids are defined according to the published specifications of the Gas Processors Association and the American Society for Testing and Materials and are classified as follows: ethane, propane, normal butane, isobutane, pentanes plus, and other products from natural gas processing plants (i.e., products meeting the standards for finished petroleum products produced at natural gas processing plants, such as finished motor gasoline, finished aviation gasoline, special naphthas, kerosene, distillate fuel oil, and miscellaneous products).

*Natural Gas Processing Plant.* A gas processing plant is a facility designed (1) to achieve the recovery of natural gas liquids from the stream of natural gas which may or may not have been processed through lease separators and field facilities, and (2) to control the quality of the natural gas to be marketed. Cycling plants are classified as gas processing plants.

*Natural Gasoline and Isopentane.* A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas, that meets vapor pressure, end-point, and other specifications for natural gasoline set by the Gas Processors Association. Includes isopentane which is a saturated branch-chain hydrocarbon, (C5H12), obtained by fractionation of natural gasoline or isomerization of normal pentane.

*Normal Butane. See Butane.*

*OPEC.* The acronym for the Organization of Petroleum Exporting Countries, that have organized for the purpose of negotiating with oil companies on matters of oil production, prices and future concession rights. Current members are Algeria, Ecuador, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela.

*Operable Capacity.* The amount of capacity that, at the beginning of the period, is in operation; not in operation and not under active repair, but capable of being placed in operation within 30 days; or not in operation but under active repair that can be completed within 90 days. Operable capacity is the sum of the operating and idle capacity and is measured in barrels per calendar day or barrels per stream day.

*Operating Capacity.* The component of operable capacity that is in operation at the beginning of the period.

*Other Hydrocarbons.* Materials received by a refinery and consumed as a raw material. Includes hydrogen, coal tar derivatives, gilsonite, and natural gas received by the refinery for reforming into hydrogen. Natural gas to be used as fuel is excluded.

*Oxygenates.* Oxygenates include both alcohols and ethers used as octane boosting additives for gasoline (e.g., methyl tertiary butyl ether).

*Pentanes Plus.* A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas. Includes isopentane, natural gasoline, and plant condensate.

*Petrochemical Feedstocks.* Chemical feedstocks derived from petroleum principally for the manufacture of chemicals, synthetic rubber, and a variety of plastics. The categories reported are "Naphtha-Less than 400 degrees F" and "Other oils over 400 degrees F."

> *Naphtha-Less Than 400 Degrees F.* A naphtha with a boiling range of less than 400 degrees F that is intended for use as a petrochemical feedstock.
>
> *Other Oils-Over 400 Degrees F.* Oils with a boiling range of over 400 degrees F that is intended for use as a petrochemical feedstock.

*Petroleum Coke.* A residue, the final product of the condensation process in cracking. This product is reported as marketable coke or catalyst coke. The conversion factor is 5 barrels of 42 U.S. gallons per short ton.

> *Marketable Coke.* Those grades of coke produced in delayed or fluid cokers which may be recovered as relatively pure carbon. This "green" coke may be sold as is or further purified by calcining.
>
> *Catalyst Coke.* In many catalytic operations (e.g., catalytic cracking) carbon is deposited on the catalyst, thus deactivating the catalyst. The catalyst is reactivated by burning off the carbon, which is used as a fuel in the refining process. This carbon or coke is not recoverable in a concentrated form.

*Petroleum Products.* Petroleum products are obtained from the processing of crude oil (including lease condensate), natural gas, and other hydrocarbon compounds. Petroleum products include unfinished oils, liquefied petroleum gases, pentanes plus, aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, petrochemical feedstocks, special naphthas, lubricants, waxes, petroleum coke, asphalt, road oil, still gas, and miscellaneous products.

*Plant Condensate.* One of the natural gas liquids, mostly pentanes and heavier hydrocarbons, recovered and separated as liquids at gas inlet separators or scrubbers in processing plants.

*Primary Stocks.* Stocks of crude oil or petroleum products held in storage at (or in) leases, refineries, natural gas processing plant pipelines, tankfarms, and bulk terminals that can store at least 50,000 barrels of petroleum products or that can receive petroleum products by tanker, barge, or pipeline. Crude oil that is in-transit by water from Alaska, or that is stored on Federal leases or in the Strategic Petroleum Reserve is included. Primary Stocks exclude stocks of foreign origin that are held in bonded warehouse storage.

***Production Capacity.*** The amount of product that can be produced from processing facilities.

***Propane.*** A normally gaseous straight-chain hydrocarbon, ($C_3H_8$). It is a colorless paraffinic gas that boils at a temperature of -43.67 degrees F. It is extracted from natural gas or refinery gas streams. It includes all products designated in ASTM Specification D1835 and Gas Processors Association Specifications for commercial propane and HD-5 propane.

***Propylene.*** An olefinic hydrocarbon, ($C_3H_6$), recovered from refinery processes or petrochemical processes.

***Refinery.*** An installation that manufactures finished petroleum products from crude oil, unfinished oils, natural gas liquids, other hydrocarbons, and alcohol.

***Residual Fuel Oil.*** The topped crude of refinery operations which includes No. 5 and No. 6 fuel oils as defined in ASTM Specification D396 and Federal Specification VV-F-815C, Navy Special fuel oil as defined in Military Specification MIL-F-859E including Amendment 2 (NATO Symbol F-77), and Bunker C fuel oil. Residual fuel oil is used for the production of electric power, space heating, vessel bunkering, and various industrial purposes. Imports of residual fuel oil include "Imported Crude Oil Burned as Fuel."

***Residuum.*** Residue from crude oil after distilling off all but the heaviest components, with a boiling range greater than 1000 degrees F.

***Road Oil.*** Any heavy petroleum oil, including residual asphaltic oil used as a dust pallative and surface treatment on roads and highways. It is generally produced in six grades from 0, the most liquid, to 5, the most viscous.

***Shell Storage Capacity.*** The design capacity of a petroleum storage tank and is always greater than or equal to working storage capacity.

***Special Naphthas.*** All finished products within the naphtha boiling range that are used as paint thinners, cleaners, or solvents. These products are refined to a specified flash point. Special naphthas include all commercial hexane and cleaning solvents conforming to ASTM Specification D1836 and D484, respectively. Naphthas to be blended or marketed as motor gasoline or aviation gasoline, or that are to be used as petrochemical and synthetic natural gas (SNG) feedstocks are excluded.

***Steam (Purchased).*** Steam, purchased for use by a refinery, that was not generated from within the refinery complex.

***Still Gas (Refinery Gas).*** Any form or mixture of gases produced in refineries by distillation, cracking, reforming, and other processes. The principal constituents are methane, ethane, ethylene, normal butane, butylene, propane, propylene, etc. Still gas is used as a refinery fuel and a petrochemical feedstock. The conversion factor is 6.000 million Btu per barrel (42 U.S. gallons).

***Strategic Petroleum Reserve (SPR).*** Petroleum stocks maintained by the Federal Government for use during periods of major supply interruption.

***Sulfur.*** A nonmetallic element of lemon-yellow color, sometimes known as "brimstone."

***Thermal Cracking.*** A refining process in which heat and pressure are used to break down, rearrange, or combine hydrocarbon molecules. Thermal cracking includes gas oil, visbreaking, fluid coking, delayed coking, and other thermal cracking processes (e.g., flexicoking). See individual categories for definition.

***Toluene.*** An aromatic hydrocarbon, ($C_6H_5CH_3$), somewhat similar to benzene but of a higher boiling point produced in the coking of coal and also by petroleum refining processes. It is the basis of dyes, explosives, and aromatic compounds. Along with xylene, it is a key component in unleaded gasoline.

***Unfinished Oils.*** Includes all oils requiring further processing, except those requiring only mechanical blending. Includes naphthas, kerosene, light and heavy gas oils, and residuum. See individual categories for definition.

***Unfractionated Streams.*** Mixtures of unsegregated natural gas liquid components excluding those in plant condensate. This product is extracted from natural gas.

***United States.*** The United States is defined as the 50 States and the District of Columbia. U.S. exports include shipments to U.S. territories, and imports include receipts from U.S. territories.

***Vacuum Distillation.*** Distillation under reduced pressure (less the atmospheric) which lowers the boiling temperature of the liquid being distilled. This technique with its relatively low temperatures prevents cracking or decomposition of the charge stock.

***Visbreaking.*** A thermal process in which heavy atmospheric or vacuum-still bottoms are cracked at moderate temperatures to increase production of distillate products and reduce viscosity of the distillation residues.

***Wax.*** A solid or semi-solid material derived from petroleum distillates or residues by such treatments as chilling, precipitating with a solvent, or de-oiling. It is light-colored, more-or-less translucent crystalline mass, slightly greasy to the touch, consisting of a mixture of solid hydrocarbons in which the paraffin series predominates. Includes all marketable wax whether crude scale or fully refined. The three grades included are microcrystalline, crystalline-fully refined, and crystalline-other. The conversion factor is 280 pounds per 42 U.S. gallons per barrel.

***Microcrystalline Wax.*** Wax extracted from certain petroleum residues having a finer and less apparent crystalline structure than paraffin wax and having the following physical characteristics: Penetration at 77 degrees F (D1321)-60 maximum. Viscosity at 210 degrees F in Saybolt Universal Seconds (SUS). (D88)-60 SUS (10.22 centistokes) minimum to 150 SUS (31.8 centistokes) maximum. Oil content (D721)-5 percent minimum.

***Crystalline-Fully Refined Wax.*** A light-colored paraffin wax having the following characteristics: Viscosity at 210 degrees F (D88)-59.9 SUS (10.18 centistokes) maximum. Oil content (D721)-0.5 percent maximum. Other +20 color, Saybolt minimum.

***Crystalline-Other Wax.*** A paraffin wax having the following characteristics: Viscosity at 210 degrees F (D88)-59.9 SUS (10.18 centistokes) maximum. Oil content (D721)-0.51 percent minimum to 15 percent maximum.

***Western Hemishpere.*** That half of the earth that includes North and South America and adjacent islands.

***Working Storage Capacity.*** The volume between the maximum safe fill capacity and the quantity below which pump suction is ineffective (bottoms).

***Xylene.*** An aromatic hydrocarbon, (C6H4Y(CH3)2), produced in petroleum refining (cracking) processes. One important use is as a solvent in the manufacture of paints. Along with toluene, it is a key ingredient in unleaded gasoline.

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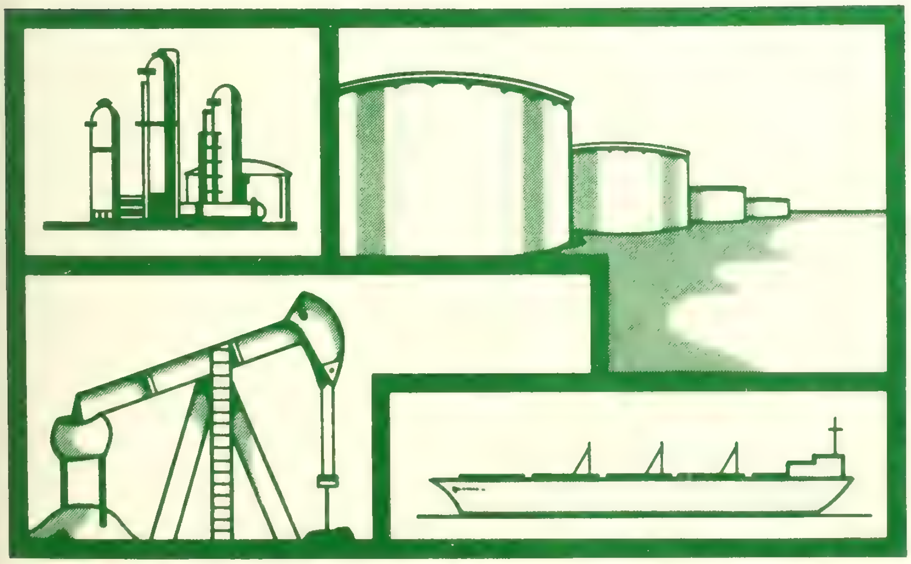
# Petroleum Supply Monthly

November 1988



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# Petroleum Supply Monthly

## November 1988

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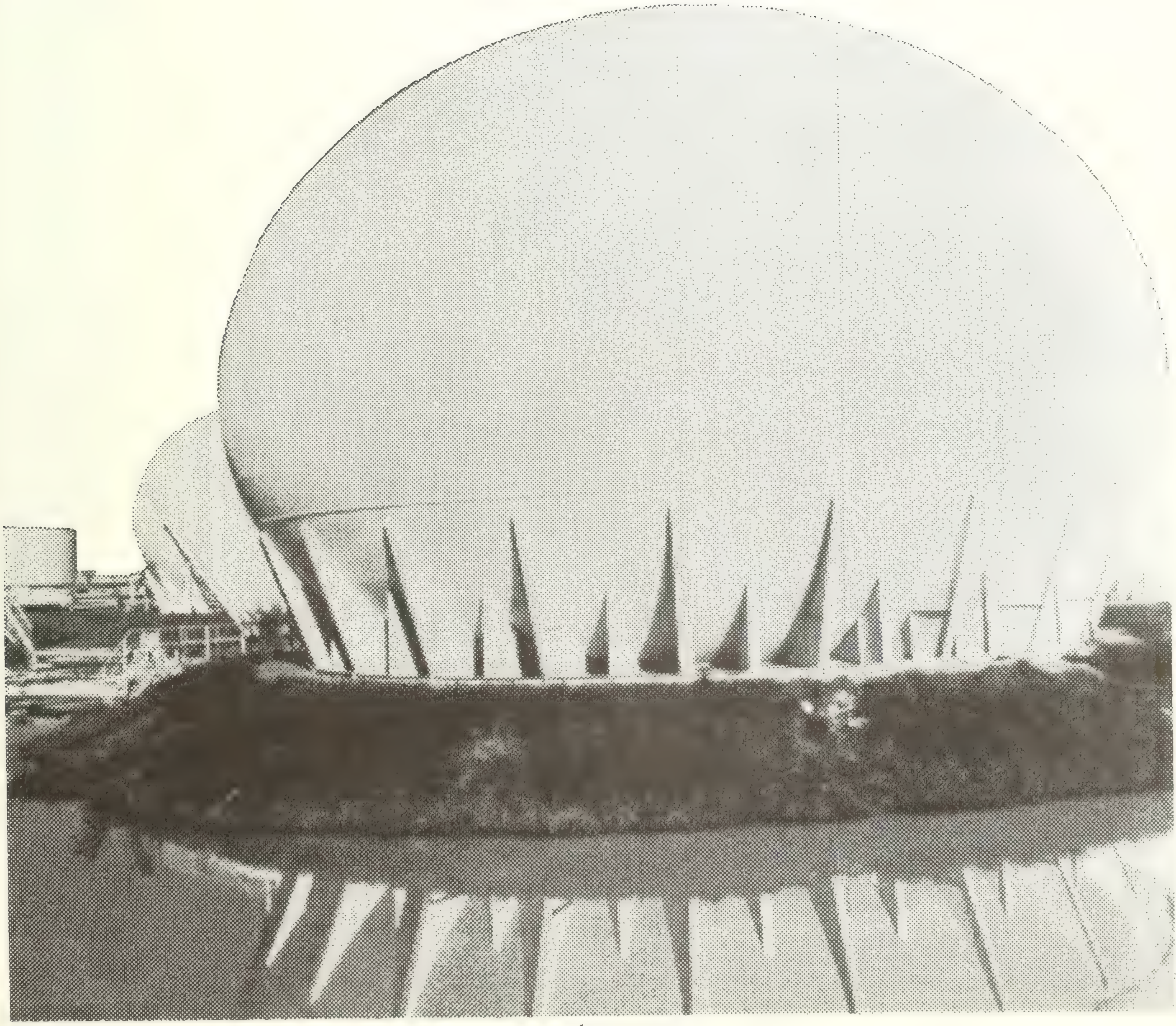
# Highlights



*Spherical tanks are used to store liquefied petroleum gases under pressure.*

# Highlights

Total U.S. demand for petroleum products (measured as product supplied) averaged 17.4 million barrels per day in November 1988 (Table H1). This is nearly 0.1 million barrels per day lower than in October but almost 1.1 million barrels per day higher than in November 1987. Total product supplied through the first 11 months of 1988 averaged 17.1 million barrels per day, 2.8 percent higher than during the comparable period of 1987.

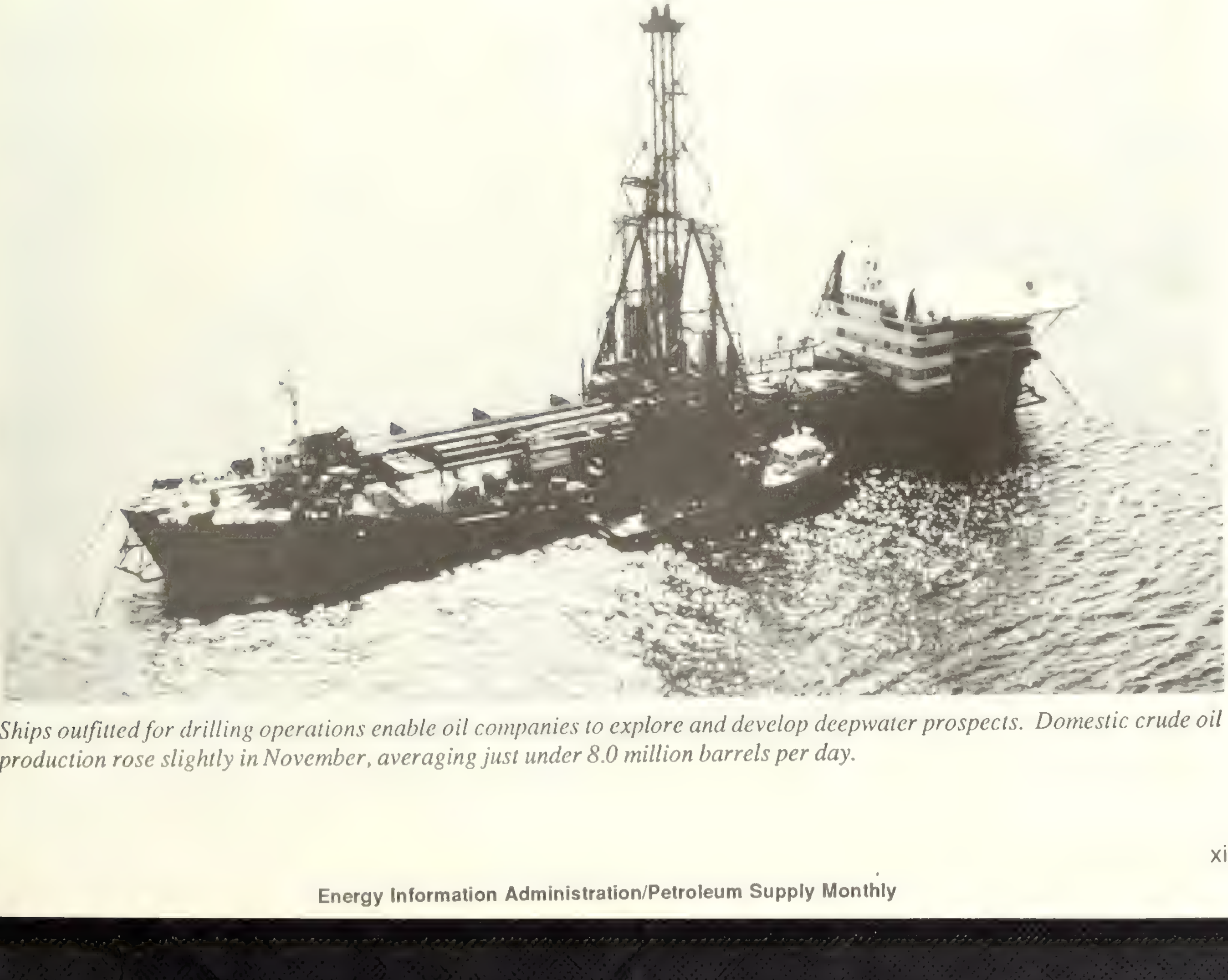
Other highlights for November 1988 include the following:

- Total product stocks increased in November to 738.7 million barrels, 4.1 million barrels above the level for October.
- Crude oil imports, excluding those for the Strategic Petroleum Reserve (SPR), fell nearly 0.6 million barrels per day to 4.9 million barrels per day.
- Refinery utilization rose from a rate of 83.5 percent in October to 83.9 percent in November.

## Product Supplied

Residual fuel oil demand averaged 1.5 million barrels per day in November, 0.2 million barrels per day above the level for October. The increased demand is primarily attributable to seasonal factors as well as fuel switching and stocking linked to the improved competitive position of heavy fuel oils in utility markets relative to natural gas. For the first 11 months of 1988, residual fuel oil demand averaged 1.3 million barrels per day, 3.2 percent higher than during the first 11 months of 1987.

Demand for finished motor gasoline climbed almost 0.1 million barrels per day in November to 7.4 million barrels per



*Ships outfitted for drilling operations enable oil companies to explore and develop deepwater prospects. Domestic crude oil production rose slightly in November, averaging just under 8.0 million barrels per day.*

## Table H1. Petroleum Supply Summary, November 1988
(Million Barrels per Day, Except Where Noted)

| Category | 1988 | | | 1987 | Cumulative January Through November | |
|---|---|---|---|---|---|---|
| | November | October | Difference[1] | November | 1988 | 1987 |
| **Products Supplied** | **17.4** | **17.5** | **-0.1** | **16.3** | **17.1** | **16.6** |
| Finished Motor Gasoline | 7.4 | 7.3 | 0.1 | 7.2 | 7.3 | 7.2 |
| Distillate Fuel Oil | 3.2 | 3.2 | -0.1 | 2.9 | 3.1 | 2.9 |
| Residual Fuel Oil | 1.5 | 1.3 | 0.2 | 1.2 | 1.3 | 1.2 |
| Liquefied Petroleum Gases | 1.8 | 1.8 | (s) | 1.7 | 1.6 | 1.6 |
| Other Petroleum Products[2] | 3.7 | 3.9 | -0.2 | 3.3 | 3.7 | 3.6 |
| Crude Oil | (s) | (s) | (s) | (s) | (s) | (s) |
| **Crude Oil Inputs** | **13.2** | **13.2** | (s) | **13.0** | **13.3** | **12.8** |
| **Refinery Utilization (percent)** | **83.9** | **83.5** | **0.4** | **82.3** | **84.4** | **83.0** |
| **Imports** | **7.5** | **7.7** | **-0.1** | **7.1** | **7.1** | **6.7** |
| **Crude Oil** | **5.0** | **5.5** | **-0.5** | **5.0** | **5.0** | **4.7** |
| SPR | 0.1 | (s) | (s) | 0.1 | 0.1 | 0.1 |
| Other | 4.9 | 5.5 | -0.6 | 4.9 | 5.0 | 4.6 |
| **Products** | **2.5** | **2.1** | **0.4** | **2.1** | **2.1** | **2.0** |
| Finished Motor Gasoline | 0.5 | 0.4 | 0.1 | 0.5 | 0.4 | 0.4 |
| Distillate Fuel Oil | 0.3 | 0.3 | (s) | 0.2 | 0.3 | 0.2 |
| Residual Fuel Oil | 0.8 | 0.5 | 0.2 | 0.6 | 0.6 | 0.6 |
| Liquefied Petroleum Gases | 0.3 | 0.2 | (s) | 0.2 | 0.2 | 0.2 |
| Other Petroleum Products[2] | 0.7 | 0.7 | (s) | 0.6 | 0.7 | 0.6 |
| **Exports** | **0.7** | **0.7** | (s) | **0.7** | **0.8** | **0.7** |
| Crude Oil | 0.2 | 0.2 | (s) | 0.2 | 0.2 | 0.1 |
| Products | 0.6 | 0.6 | (s) | 0.6 | 0.6 | 0.6 |
| **Total Net Imports** | **6.8** | **6.9** | **-0.1** | **6.3** | **6.3** | **5.9** |
| **Stock Change[3]** | **0.1** | **0.1** | **0.1** | **0.8** | **0.1** | **0.1** |
| Crude Oil | (s) | 0.4 | -0.4 | 0.4 | (s) | 0.2 |
| Products | 0.1 | -0.3 | 0.5 | 0.5 | 0.1 | -0.1 |
| **Total Stocks at End of Period (Million Barrels)** | **1,634.4** | **1,630.1** | **4.2** | **1,634.9** | -- | -- |
| **Crude Oil** | **895.7** | **895.6** | **0.1** | **902.2** | -- | -- |
| SPR | 558.7 | 556.0 | 2.7 | 538.5 | -- | -- |
| Other | 337.0 | 339.6 | -2.6 | 363.6 | -- | -- |
| **Products** | **738.7** | **734.5** | **4.1** | **732.8** | -- | -- |
| Finished Motor Gasoline | 183.7 | 180.0 | 3.7 | 188.1 | -- | -- |
| Distillate Fuel Oil | 128.7 | 127.9 | 0.8 | 128.0 | -- | -- |
| Residual Fuel Oil | 45.1 | 42.4 | 2.7 | 50.0 | -- | -- |
| Liquefied Petroleum Gases | 115.1 | 119.9 | -4.8 | 108.6 | -- | -- |
| Other Petroleum Products[2] | 266.0 | 264.3 | 1.8 | 258.1 | -- | -- |

---

[1] Difference is equal to volume for current month minus volume for previous month.

[2] Includes pentanes plus, other hydrocarbons and alcohol, unfinished oils, gasoline blending components, and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil, and liquefied petroleum gases.

[3] A negative number indicates a decrease in stocks and a positive number indicates an increase.

(s) = Less than 0.05 million barrels or less than 0.05 percent.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration: *Petroleum Supply Annual*, 1987 (June 1988). Appropriate issues of *Petroleum Supply Monthly* . (See Explanatory Notes 9.1 through 9.6.)

day. Motor gasoline demand for the first 11 months of 1988 averaged 7.3 million barrels per day, 1.5 percent above the level during the same period last year. Continued growth in highway travel, spurred on by lower real gasoline prices, explains much of the year-to-date increase in demand in 1988.

Distillate fuel oil demand dropped about 0.1 million barrels per day in November and averaged 3.2 million barrels per day, although continued secondary stocking kept demand higher than usual. Through the first 11 months of 1988, distillate fuel oil consumption averaged nearly 3.1 million barrels per day, 4.0 percent higher than during the same time in 1987. The growth in distillate demand in 1988 is primarily attributable to increased demand in the transportation sector, particularly trucking and rails.

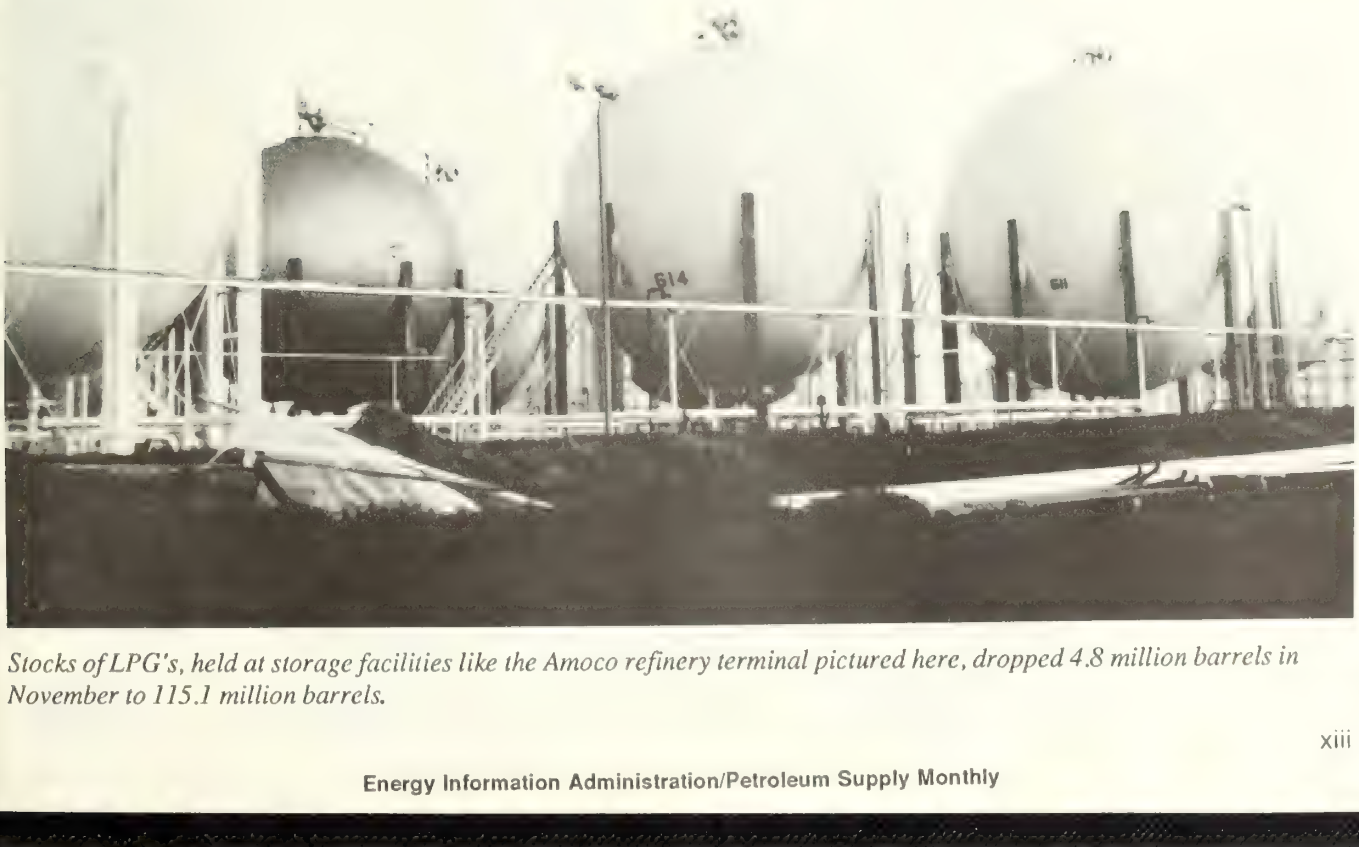
Liquefied petroleum gas (LPG) demand in November changed marginally from its rate in October and averaged nearly 1.8 million barrels per day for the month. Year-to-date LPG demand averaged 1.6 million barrels per day, 3.0 percent higher than during the same 11-month period in 1987. Strong demand for olefins at petrochemical plants is responsible for much of the increase in LPG product supplied observed in 1988.

Kerosene-type jet fuel demand in November averaged 1.2 million barrels per day, almost 0.1 million barrels per day lower than in October. For the first 11 months of 1988, kerosene-type jet fuel averaged over 1.2 million barrels per day, 4.6 percent higher than during the comparable period last year. Sustained growth in commercial air traffic accounts for much of the rise in kerosene-type jet fuel demand this year.

A seasonal slowdown in road construction and maintenance activities reduced asphalt and road oil demand in November. From nearly 0.6 million barrels per day in October, asphalt and road oil deliveries fell to about 0.4 million barrels per day in November. For the first 11 months of 1988, asphalt and road oil demand was 0.5 million barrels per day, the same as during the comparable period in 1987.

## Product Stocks

Total stocks of petroleum products rose 4.1 million barrels by the end of November to reach 738.7 million barrels. This is 5.9 million barrels higher than at the same time last year.



*Stocks of LPG's, held at storage facilities like the Amoco refinery terminal pictured here, dropped 4.8 million barrels in November to 115.1 million barrels.*

Following two straight months of decline, finished motor gasoline stocks increased by 3.7 million barrels in November, to reach 183.7 million barrels by month's end. An increase in motor gasoline stocks is typical at this time of year, when refinery activity picks up after fall maintenance shutdowns. Motor gasoline inventories at the end of November were 4.3 million barrels below their level at the end of November 1987.

Despite an increase in demand of 0.2 million barrels per day, residual fuel oil stocks grew by 2.7 million barrels in November to a level of 45.1 million barrels. An increase in imports of over 0.2 million barrels per day contributed to the buildup. Stocks of residual fuel oil at the end of November were 4.9 million barrels below their level of a year ago.

Stocks of distillate fuel oil climbed to 128.7 million barrels by the end of November, just 0.8 million barrels from the level at the end of October. November is normally a time of significant primary stocking of distillate fuel oil, but relatively stable and strong demand for distillates through November kept inventories steady. Last year at this time, distillate fuel oil stocks were 0.7 million barrels lower than in November 1988.

LPG stocks followed seasonal patterns and fell 4.8 million barrels to 115.1 million barrels. A seasonal increase in LPG inputs of over 0.1 million barrels per day was responsible for most of the drawdown in stocks. LPG stocks at the end of November were 6.5 million barrels higher than the level of a year ago.

## Crude Oil

After 3 consecutive monthly decreases, crude oil stocks (excluding SPR) rebounded in October, but then slipped 2.6 million barrels in November to 337.0 million barrels. Lower import volumes and a somewhat higher rate of refinery inputs contributed to the decrease in stocks. Crude oil stocks at the end of November 1988 were 26.6 million barrels below their level of a year ago.

Domestic crude oil production continued to recover in November after falling to a yearly low of 7.9 million barrels per day in September. Crude oil production in November was estimated at just under 8.0 million barrels per day. For the first 11 months of 1988, crude oil production averaged over 8.1 million barrels per day, 2.5 percent lower than in the comparable period in 1987.

Imports of crude oil (excluding SPR) in November averaged over 4.9 million barrels per day, almost 0.6 million barrels per day below the level for October. Lower levels of deliveries from Saudi Arabia and Nigeria accounted for most of the decline. Year-to-date crude oil imports averaged 5.0 million barrels per day, 8.1 percent higher than during the same period in 1987. Falling crude oil prices throughout most of the year and a concomitant decline in domestic production are responsible for most of the increase in imports during 1988.

## Refinery Utilization

Following 2 consecutive months of decline, U.S. refinery utilization increased from 83.5 percent in October to 83.9 percent in November. Gross inputs to distillation units in November were 13.3 million barrels per day, slightly higher than last month. Operable capacity in November was somewhat lower than in October and averaged 15.9 million barrels per day. Downstream activity also increased this November. Inputs of fresh feed to catalytic cracking, catalytic hydrocracking, and coking units averaged 6.8 million barrels per day, 0.1 million barrels per day above the level for October. The increase in downstream refining activity is reflected in the rise in motor gasoline production during the month.

# Summary Statistics

*Incinerators such as this one at a chemical installation turn toxic chemicals into water vapor and other harmless elements.*

# Table S1. Crude Oil[1] and Petroleum Products Overview

| | Field Production | | | Stock Withdrawal[2] | | Petroleum Products Supplied | Ending Stocks[3] |
|---|---|---|---|---|---|---|---|
| | Total Domestic[4] | Crude Oil | Natural Gas Plant Liquids | Crude Oil[5] | Petroleum Products | | Crude Oil[5] and Petroleum Products |
| | Thousand Barrels per Day | | | | | | Million Barrels |
| 1973 Average | 10,975 | 9,208 | 1,738 | 11 | -146 | 17,308 | 1,008 |
| 1974 Average | 10,498 | 8,774 | 1,688 | -62 | -117 | 16,653 | [8] 1,074 |
| 1975 Average | 10,045 | 8,375 | 1,633 | [8] -17 | [8] -15 | 16,322 | 1,133 |
| 1976 Average | 9,774 | 8,132 | 1,603 | -39 | 96 | 17,461 | 1,112 |
| 1977 Average | 9,913 | 8,245 | 1,618 | -170 | -378 | 18,431 | 1,312 |
| 1978 Average | 10,328 | 8,707 | 1,567 | -78 | 172 | 18,847 | 1,278 |
| 1979 Average | 10,179 | 8,552 | 1,584 | -148 | -25 | 18,513 | 1,341 |
| 1980 Average | 10,214 | 8,597 | 1,573 | -98 | -42 | 17,056 | [8] 1,392 |
| 1981 Average | 10,230 | 8,572 | 1,609 | [8] -290 | [8] 130 | 16,058 | 1,484 |
| 1982 Average | 10,252 | 8,649 | 1,550 | -136 | 283 | 15,296 | [8] 1,430 |
| 1983 Average | 10,299 | 8,688 | 1,559 | [8] -214 | [8] 234 | 15,231 | 1,454 |
| 1984 Average | 10,554 | 8,879 | 1,630 | -199 | -81 | 15,726 | 1,556 |
| 1985 Average | 10,636 | 8,971 | 1,609 | -50 | 153 | 15,726 | 1,519 |
| 1986 January | 10,911 | 9,137 | 1,711 | -383 | -151 | 16,088 | 1,535 |
| February | 10,916 | 9,173 | 1,696 | -37 | 804 | 16,186 | 1,514 |
| March | 10,664 | 9,013 | 1,604 | -345 | 1,160 | 16,276 | 1,489 |
| April | 10,435 | 8,864 | 1,523 | 41 | 262 | 15,945 | 1,479 |
| May | 10,440 | 8,838 | 1,543 | 260 | -1,109 | 15,993 | 1,506 |
| June | 10,187 | 8,623 | 1,504 | 3 | -1,238 | 16,049 | 1,543 |
| July | 10,225 | 8,660 | 1,507 | -541 | -422 | 16,307 | 1,573 |
| August | 9,875 | 8,374 | 1,445 | 242 | -551 | 16,618 | 1,582 |
| September | 9,852 | 8,328 | 1,468 | -217 | -973 | 15,909 | 1,618 |
| October | 9,954 | 8,419 | 1,477 | -233 | 476 | 16,602 | 1,610 |
| November | 10,061 | 8,412 | 1,569 | 95 | -147 | 16,221 | 1,612 |
| December | 9,985 | 8,352 | 1,571 | 186 | 443 | 17,131 | 1,593 |
| **Average** | **10,289** | **8,680** | **1,551** | **-78** | **-124** | **16,281** | -- |
| 1987 January | 10,139 | 8,480 | 1,582 | -166 | 376 | 16,684 | 1,586 |
| February | 10,073 | 8,389 | 1,618 | -22 | 831 | 16,908 | 1,563 |
| March | 10,131 | 8,464 | 1,598 | -125 | 340 | 16,165 | 1,557 |
| April | 10,139 | 8,498 | 1,590 | 50 | 532 | 16,524 | 1,539 |
| May | 9,977 | 8,336 | 1,585 | 36 | -116 | 16,026 | 1,542 |
| June | 9,906 | 8,279 | 1,578 | -165 | -42 | 16,830 | 1,548 |
| July | 9,895 | 8,251 | 1,582 | 33 | -372 | 17,113 | 1,558 |
| August | 9,843 | 8,210 | 1,571 | -345 | -737 | 16,346 | 1,592 |
| September | 9,851 | 8,205 | 1,582 | -220 | -236 | 16,670 | 1,606 |
| October | 10,037 | 8,364 | 1,602 | -661 | 523 | 16,941 | 1,610 |
| November | 10,112 | 8,397 | 1,637 | -355 | -478 | 16,343 | 1,635 |
| December | 10,001 | 8,318 | 1,621 | 405 | 482 | 17,445 | 1,607 |
| **Average** | **10,008** | **8,349** | **1,595** | **-128** | **87** | **16,665** | – |
| 1988 January | [E] 9,874 | [E] 8,245 | 1,569 | 56 | 285 | 17,224 | 1,597 |
| February | [E] 10,016 | [E] 8,376 | 1,594 | -130 | 895 | 17,584 | 1,575 |
| March | [E] 10,044 | [E] 8,347 | 1,628 | -212 | 748 | 17,530 | 1,559 |
| April | [E] 9,935 | [E] 8,268 | 1,609 | -194 | -450 | 16,440 | 1,578 |
| May | [E] 9,881 | [E] 8,203 | 1,624 | -41 | -1,049 | 16,117 | 1,612 |
| June | [E] 9,815 | [E] 8,158 | 1,605 | -113 | 146 | 17,054 | 1,611 |
| July | [E] 9,728 | [E] 8,059 | 1,609 | 270 | -788 | 16,555 | 1,627 |
| August | [E] 9,756 | [E] 8,063 | 1,624 | 495 | -304 | 17,375 | 1,621 |
| September | [E] 9,585 | [E] 7,900 | 1,622 | 74 | -296 | 16,816 | 1,627 |
| October | [E] 9,703 | [E] 7,974 | 1,665 | -403 | 315 | 17,481 | 1,630 |
| November* | [RE] 9,711 | [RE] 7,985 | [R] 1,667 | [R] -4 | [R] -137 | [R] 17,426 | [R] 1,634 |
| December** | [PE] 9,743 | [PE] 8,035 | [E] 1,644 | [E] *242* | [E] *368* | [E] *18,249* | [E] *1,612* |
| **12-Mo. Average** | [PE] **9,815** | [PE] **8,134** | [E] **1,622** | [E] **5** | [E] **-25** | [E] **17,154** | – |
| **1987 12-Mo. Average** | **10,008** | **8,349** | **1,595** | **-128** | **87** | **16,665** | – |
| **1986 12-Mo. Average** | **10,289** | **8,680** | **1,551** | **-78** | **-124** | **16,281** | – |

[1] Includes lease condensate.

[2] A negative number indicates an increase in stocks and a positive number indicates a decrease.

[3] Stocks are totals as of end of period.

[4] Includes crude oil, natural gas plant liquids, other hydrocarbons, and alcohol.

[5] Includes stocks located in the Strategic Petroleum Reserve.

[6] Includes crude oil for storage in the Strategic Petroleum Reserve.

[7] Net Imports equal Imports minus Exports.

[8] In January 1975, 1981, and 1983, numerous respondents were added to surveys affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10.

Footnotes continued on following page.

# Table S1. Crude Oil[1] and Petroleum Products Overview (Continued)

| | Imports | | | Exports | | | Net Imports[7] |
|---|---|---|---|---|---|---|---|
| | Total | Crude Oil [6] | Petroleum Products | Total | Crude Oil | Petroleum Products | |
| | Thousand Barrels per Day | | | | | | |
| **1973 Average** | **6,256** | **3,244** | **3,012** | 231 | 2 | 229 | 6,025 |
| **1974 Average** | **6,112** | **3,477** | **2,635** | 221 | 3 | 218 | 5,892 |
| **1975 Average** | **6,056** | **4,105** | **1,951** | 209 | 5 | 204 | 5,846 |
| **1976 Average** | **7,313** | **5,287** | **2,026** | 223 | 8 | 215 | 7,090 |
| **1977 Average** | **8,807** | **6,615** | **2,193** | 243 | 50 | 193 | 8,565 |
| **1978 Average** | **8,363** | **6,356** | **2,008** | 362 | 158 | 204 | 8,002 |
| **1979 Average** | **8,456** | **6,519** | **1,937** | 472 | 235 | 237 | 7,984 |
| **1980 Average** | **6,909** | **5,263** | **1,646** | 544 | 287 | 258 | 6,365 |
| **1981 Average** | **5,996** | **4,396** | **1,599** | 595 | 228 | 367 | 5,401 |
| **1982 Average** | **5,113** | **3,488** | **1,625** | 815 | 236 | 579 | 4,298 |
| **1983 Average** | **5,051** | **3,329** | **1,722** | 739 | 164 | 575 | 4,312 |
| **1984 Average** | **5,437** | **3,426** | **2,011** | 722 | 181 | 541 | 4,715 |
| **1985 Average** | **5,067** | **3,201** | **1,866** | 781 | 204 | 577 | 4,286 |
| **1986** January | 5,573 | 3,472 | 2,101 | 859 | 159 | 700 | 4,714 |
| February | 4,676 | 2,968 | 1,709 | 876 | 162 | 715 | 3,800 |
| March | 4,712 | 2,988 | 1,724 | 732 | 212 | 520 | 3,980 |
| April | 5,439 | 3,684 | 1,755 | 850 | 94 | 756 | 4,589 |
| May | 6,400 | 4,250 | 2,150 | 724 | 98 | 625 | 5,676 |
| June | 6,848 | 4,635 | 2,213 | 642 | 240 | 401 | 6,206 |
| July | 6,942 | 4,726 | 2,216 | 685 | 65 | 620 | 6,256 |
| August | 7,168 | 4,859 | 2,309 | 868 | 233 | 635 | 6,300 |
| September | 7,090 | 5,031 | 2,059 | 714 | 161 | 553 | 6,375 |
| October | 6,427 | 4,419 | 2,008 | 831 | 151 | 680 | 5,597 |
| November | 6,592 | 4,615 | 1,977 | 821 | 115 | 706 | 5,771 |
| December | 6,700 | 4,412 | 2,288 | 820 | 159 | 661 | 5,881 |
| **Average** | **6,224** | **4,178** | **2,045** | **785** | **154** | **631** | **5,439** |
| **1987** January | 6,353 | 4,385 | 1,968 | 703 | 84 | 619 | 5,650 |
| February | 5,984 | 3,866 | 2,118 | 977 | 284 | 694 | 5,007 |
| March | 5,794 | 3,779 | 2,015 | 720 | 150 | 570 | 5,074 |
| April | 5,911 | 4,132 | 1,779 | 870 | 247 | 624 | 5,041 |
| May | 6,073 | 4,340 | 1,732 | 666 | 69 | 597 | 5,407 |
| June | 6,769 | 4,807 | 1,962 | 669 | 116 | 554 | 6,099 |
| July | 7,588 | 5,295 | 2,293 | 680 | 149 | 531 | 6,908 |
| August | 7,454 | 5,510 | 1,944 | 664 | 141 | 523 | 6,790 |
| September | 7,178 | 5,110 | 2,068 | 795 | 116 | 680 | 6,382 |
| October | 7,068 | 5,142 | 1,926 | 646 | 84 | 562 | 6,422 |
| November | 7,068 | 5,013 | 2,055 | 737 | 164 | 573 | 6,331 |
| December | 6,833 | 4,640 | 2,194 | 1,057 | 220 | 838 | 5,776 |
| **Average** | **6,678** | **4,674** | **2,004** | **764** | **151** | **613** | **5,914** |
| **1988** January | 6,900 | 4,619 | 2,281 | 891 | 212 | 679 | 6,009 |
| February | 6,995 | 4,692 | 2,303 | 867 | 149 | 718 | 6,128 |
| March | 6,727 | 4,788 | 1,938 | 839 | 218 | 622 | 5,888 |
| April | 7,050 | 5,126 | 1,924 | 678 | 117 | 562 | 6,371 |
| May | 7,218 | 5,234 | 1,983 | 817 | 141 | 676 | 6,401 |
| June | 6,885 | 5,055 | 1,830 | 941 | 141 | 800 | 5,944 |
| July | 6,994 | 5,006 | 1,988 | 831 | 191 | 640 | 6,164 |
| August | 7,174 | 5,039 | 2,135 | 817 | 155 | 661 | 6,357 |
| September | 7,220 | 5,183 | 2,037 | 675 | 122 | 554 | 6,545 |
| October | 7,666 | 5,542 | 2,124 | 737 | 171 | 566 | 6,929 |
| November* | R 7,544 | R 5,017 | R 2,527 | R 721 | R 151 | R 569 | R 6,823 |
| December** | E *7,933* | E *5,322* | E *2,610* | E 707 | E 147 | E 560 | E 7,225 |
| **12-Mo. Average** | E **7,193** | E **5,054** | E **2,140** | E **793** | E **160** | E **634** | E **6,400** |
| **1987 12-Mo. Average** | **6,678** | **4,674** | **2,004** | **764** | **151** | **613** | **5,914** |
| **1986 12-Mo. Average** | **6,224** | **4,178** | **2,045** | **785** | **154** | **631** | **5,439** |

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Footnotes continued.

R = Revised data. (s) = Less than 500 barrels per day. E = Estimated. PE = Preliminary estimate. RE = Revised estimate.

* See Explanatory Note 9.1.

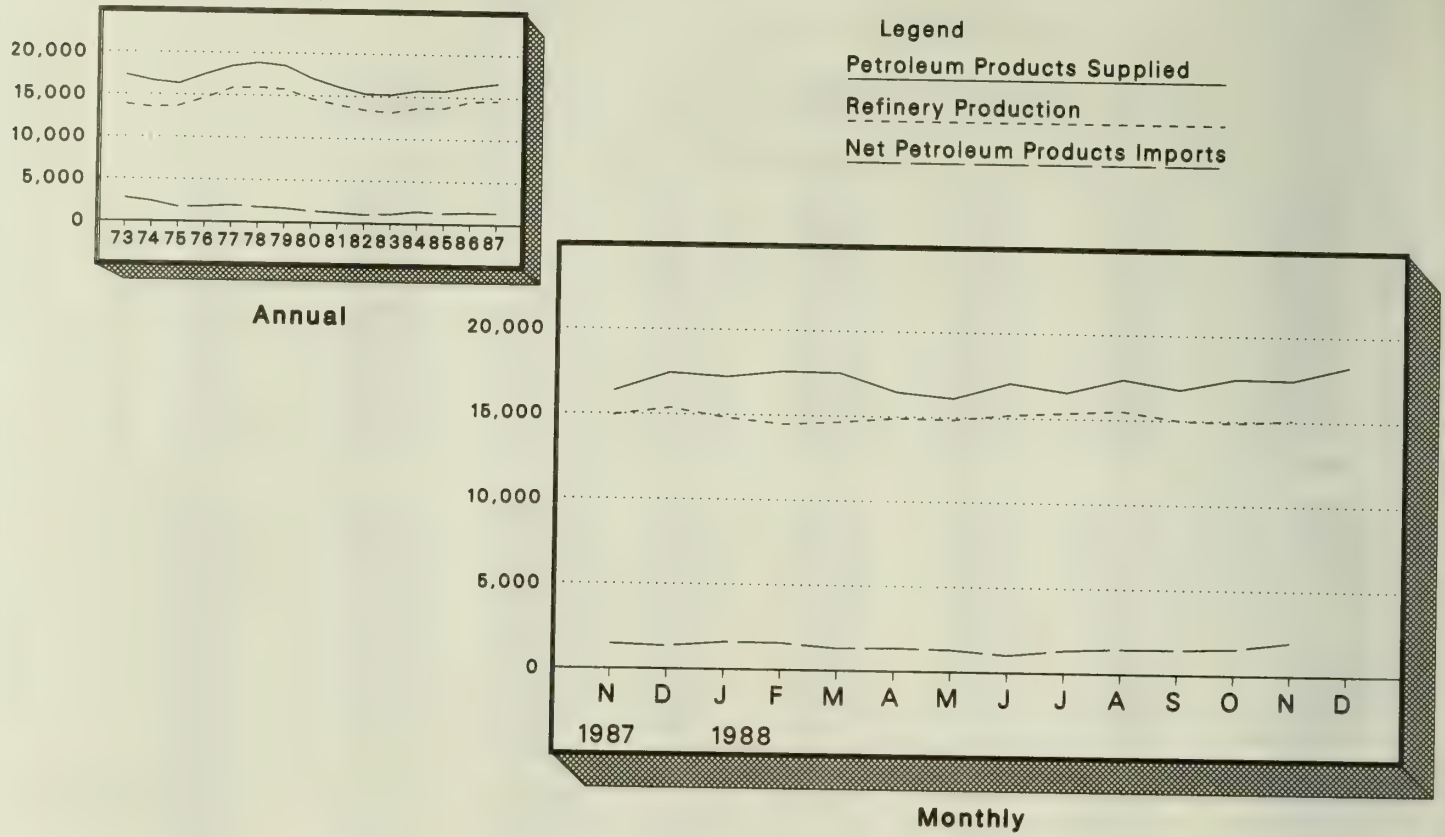
** Italics denote estimates based upon preliminary data. See Explanatory Note 8.

Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: See the last page of this section.

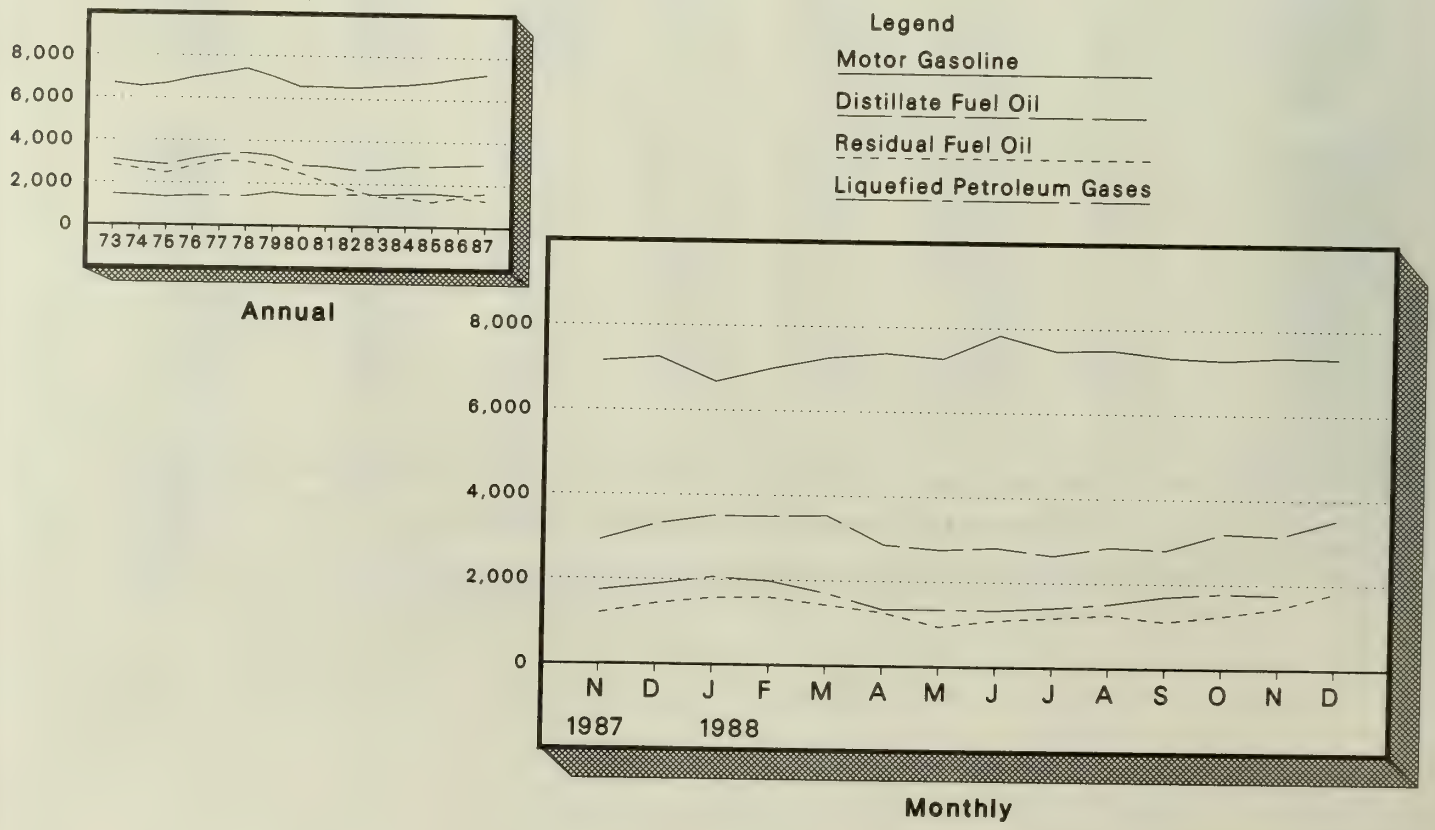
## Figure S1. Petroleum Overview

(Thousand Barrels per Day)

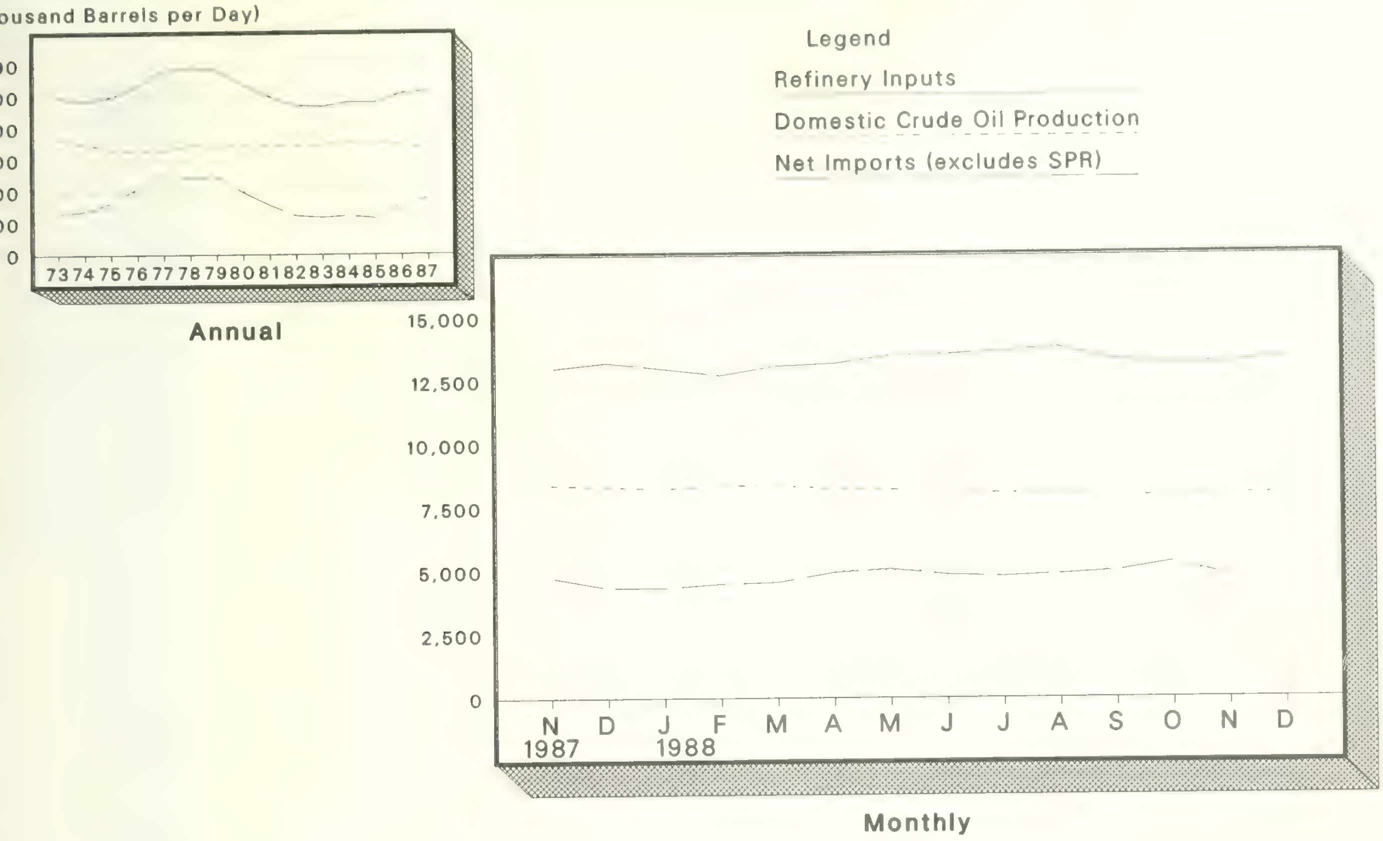


## Figure S2. Petroleum Products Supplied

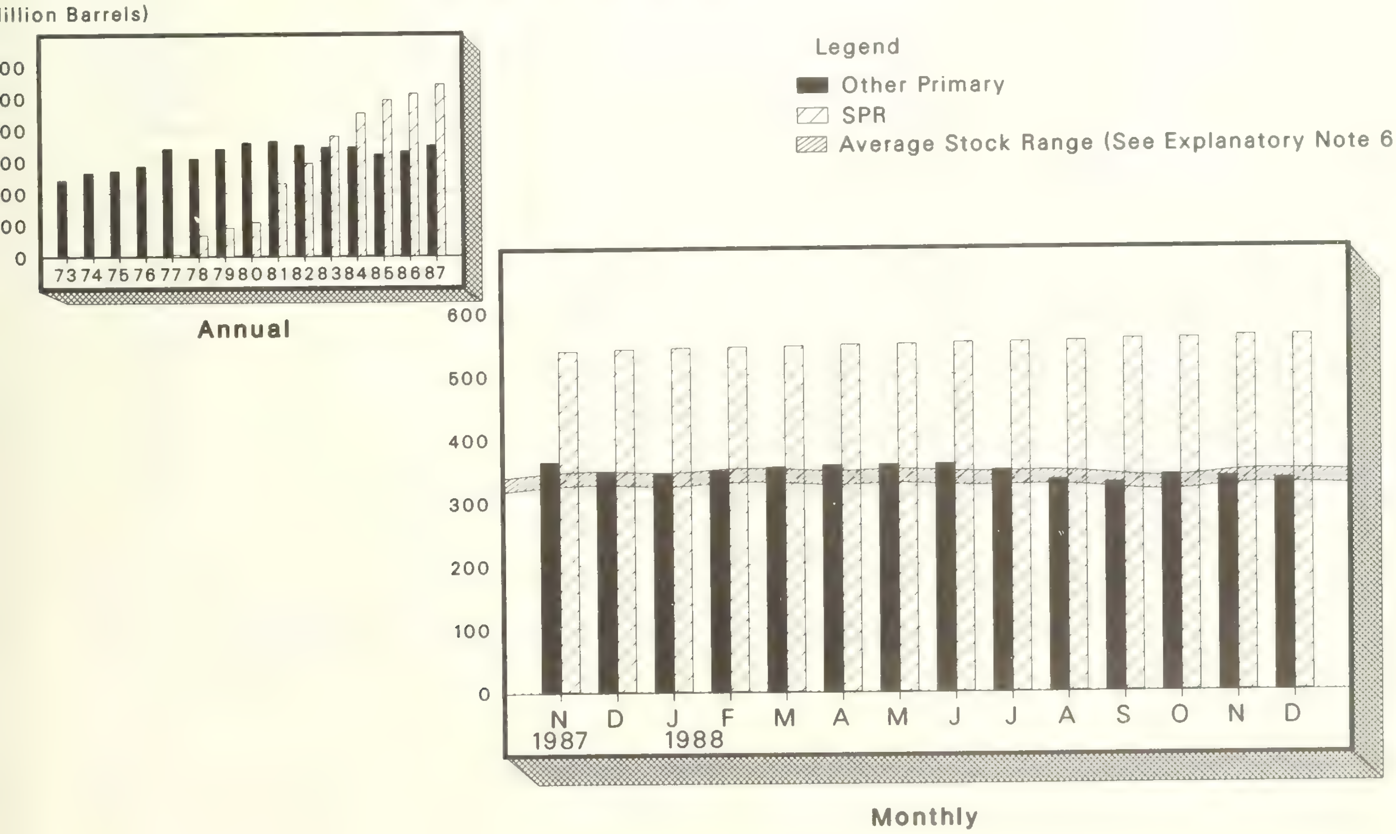
(Thousand Barrels per Day)



## ure S3. Crude Oil Supply and Disposition



## ure S4. Crude Oil Ending Stocks



# Table S2. Crude Oil[1] Supply and Disposition

| | | Supply | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Field Production | | Imports | | | Stock Withdrawal[3] | | Unaccounted for Crude Oil[5] |
| | | Total Domestic | Alaskan | Total | SPR[4] | Other | SPR[4] | Other | |
| | | Thousand Barrels per Day | | | | | | | |
| 1973 | **Average** | **9,208** | **198** | **3,244** | **–** | **3,244** | **–** | **11** | **3** |
| 1974 | **Average** | **8,774** | **193** | **3,477** | **–** | **3,477** | **–** | **-62** | **-25** |
| 1975 | **Average** | **8,375** | **191** | **4,105** | **–** | **4,105** | **–** | **-17** | **17** |
| 1976 | **Average** | **8,132** | **173** | **5,287** | **–** | **5,287** | **–** | **-39** | **77** |
| 1977 | **Average** | **8,245** | **464** | **6,615** | **21** | **6,594** | **-20** | **-150** | **-6** |
| 1978 | **Average** | **8,707** | **1,229** | **6,356** | **162** | **6,195** | **-163** | **84** | **-57** |
| 1979 | **Average** | **8,552** | **1,401** | **6,519** | **67** | **6,452** | **-67** | **-81** | **-11** |
| 1980 | **Average** | **8,597** | **1,617** | **5,263** | **44** | **5,219** | **-45** | **-52** | **34** |
| 1981 | **Average** | **8,572** | **1,609** | **4,396** | **256** | **4,141** | **-336** | [7] **46** | **83** |
| 1982 | **Average** | **8,649** | **1,695** | **3,488** | **165** | **3,323** | **-174** | **38** | **71** |
| 1983 | **Average** | **8,688** | **1,714** | **3,329** | **234** | **3,096** | **-234** | [7] **20** | **114** |
| 1984 | **Average** | **8,879** | **1,722** | **3,426** | **197** | **3,229** | **-195** | **-4** | **185** |
| 1985 | **Average** | **8,971** | **1,825** | **3,201** | **118** | **3,083** | **-117** | **67** | **145** |
| 1986 | January | 9,137 | 1,870 | 3,472 | 51 | 3,420 | -35 | -348 | 364 |
| | February | 9,173 | 1,907 | 2,968 | 24 | 2,944 | -35 | -2 | 32 |
| | March | 9,013 | 1,860 | 2,988 | 59 | 2,929 | -49 | -296 | 259 |
| | April | 8,864 | 1,836 | 3,684 | 63 | 3,621 | -63 | 104 | 70 |
| | May | 8,838 | 1,927 | 4,250 | 36 | 4,215 | -35 | 295 | 79 |
| | June | 8,623 | 1,887 | 4,635 | 64 | 4,571 | -64 | 66 | 292 |
| | July | 8,660 | 1,903 | 4,726 | 52 | 4,674 | -52 | -489 | 189 |
| | August | 8,374 | 1,811 | 4,859 | 51 | 4,809 | -51 | 293 | 93 |
| | September | 8,328 | 1,782 | 5,031 | 47 | 4,984 | -47 | -170 | 161 |
| | October | 8,419 | 1,927 | 4,419 | 37 | 4,382 | -36 | -197 | 223 |
| | November | 8,412 | 1,883 | 4,615 | 45 | 4,570 | -65 | 160 | -136 |
| | December | 8,352 | 1,807 | 4,412 | 48 | 4,365 | -68 | 254 | 28 |
| | **Average** | **8,680** | **1,867** | **4,178** | **48** | **4,130** | **-50** | **-28** | **139** |
| 1987 | January | 8,480 | 2,019 | 4,385 | 92 | 4,293 | -108 | -58 | -5 |
| | February | 8,389 | 1,853 | 3,866 | 44 | 3,822 | -64 | 42 | 382 |
| | March | 8,464 | 1,968 | 3,779 | 95 | 3,684 | -106 | -19 | 151 |
| | April | 8,498 | 1,990 | 4,132 | 57 | 4,076 | -67 | 116 | 120 |
| | May | 8,336 | 1,979 | 4,340 | 92 | 4,248 | -101 | 137 | 51 |
| | June | 8,279 | 1,930 | 4,807 | 64 | 4,743 | -69 | -97 | 434 |
| | July | 8,251 | 1,910 | 5,295 | 76 | 5,218 | -91 | 124 | 32 |
| | August | 8,210 | 1,908 | 5,510 | 63 | 5,447 | -63 | -281 | 177 |
| | September | 8,205 | 1,874 | 5,110 | 64 | 5,047 | -64 | -157 | 217 |
| | October | 8,364 | 1,986 | 5,142 | 57 | 5,085 | -57 | -604 | -3 |
| | November | 8,397 | 2,068 | 5,013 | 97 | 4,916 | -97 | -258 | 115 |
| | December | 8,318 | 2,043 | 4,640 | 68 | 4,572 | -68 | 472 | 101 |
| | **Average** | **8,349** | **1,962** | **4,674** | **73** | **4,601** | **-80** | **-49** | **145** |
| 1988 | January | $^{E}$8,245 | $^{E}$1,999 | 4,619 | 67 | 4,552 | -67 | 123 | 303 |
| | February | $^{E}$8,376 | $^{E}$2,070 | 4,692 | 49 | 4,643 | -49 | -81 | -21 |
| | March | $^{E}$8,347 | $^{E}$2,086 | 4,788 | 23 | 4,766 | -26 | -187 | 419 |
| | April | $^{E}$8,268 | $^{E}$2,029 | 5,126 | 78 | 5,049 | -77 | -117 | 126 |
| | May | $^{E}$8,203 | $^{E}$2,016 | 5,234 | 22 | 5,213 | -22 | -19 | 251 |
| | June | $^{E}$8,158 | $^{E}$1,984 | 5,055 | 70 | 4,985 | -70 | -43 | 601 |
| | July | $^{E}$8,059 | $^{E}$1,960 | 5,006 | 42 | 4,965 | -42 | 312 | 548 |
| | August | $^{E}$8,063 | $^{E}$2,009 | 5,039 | 26 | 5,013 | -26 | 521 | 385 |
| | September | $^{E}$7,900 | $^{E}$2,020 | 5,183 | 84 | 5,099 | -84 | 157 | 313 |
| | October | $^{E}$7,974 | $^{E}$2,010 | 5,542 | 43 | 5,499 | -43 | -360 | 288 |
| | November* | $^{RE}$7,985 | $^{RE}$2,027 | $^{R}$5,017 | $^{R}$89 | $^{R}$4,928 | $^{R}$-89 | $^{R}$85 | $^{R}$393 |
| | December** | $^{PE}$8,035 | $^{PE}$2,048 | $^{E}$*5,322* | $^{E}$*33* | $^{E}$*5,289* | $^{E}$*-33* | $^{E}$*275* | $^{E}$11 |
| | **12-Mo. Average** | $^{PE}$**8,134** | $^{PE}$**2,021** | $^{E}$**5,054** | $^{E}$**52** | $^{E}$**5,002** | $^{E}$**-52** | $^{E}$**57** | $^{E}$**303** |
| 1987 | **12-Mo. Average** | **8,349** | **1,962** | **4,674** | **73** | **4,601** | **-80** | **-49** | **145** |
| 1986 | **12-Mo. Average** | **8,680** | **1,867** | **4,178** | **48** | **4,130** | **-50** | **-28** | **139** |

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[1] Includes lease condensate.

[2] Stocks are totals as of end of period.

[3] A negative number indicates an increase in stocks and a positive number indicates a decrease.

[4] Strategic Petroleum Reserve.

[5] A balancing item.

[6] Beginning in January 1983, crude oil used directly as fuel is shown as product supplied.

[7] Stocks of Alaskan crude oil in transit were included beginning in January 1981. Stock withdrawals are calculated using new basis stock levels.

See Explanatory Notes 10 and 11.

Footnotes continued on following page.

# Table S2. Crude Oil[1] Supply and Disposition (Continued)

| | | Supply | Disposition | | | | Ending Stocks[2] | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Crude Used Directly [6] | Crude Losses | Refinery Inputs | Exports | Product Supplied [6] | Total | SPR [4] | Other Primary |
| | | Thousand Barrels per Day | | | | | Million Barrels | | |
| 1973 | **Average** | **-19** | **13** | **12,431** | **2** | **–** | **242** | – | 242 |
| 1974 | **Average** | **-15** | **13** | **12,133** | **3** | **–** | **265** | – | 265 |
| 1975 | **Average** | **-17** | **13** | **12,442** | **6** | **–** | **271** | – | 271 |
| 1976 | **Average** | **-18** | **15** | **13,416** | **8** | **–** | **285** | – | 285 |
| 1977 | **Average** | **-14** | **16** | **14,602** | **50** | **–** | **348** | 7 | 340 |
| 1978 | **Average** | **-14** | **16** | **14,739** | **158** | **–** | **376** | 67 | 309 |
| 1979 | **Average** | **-13** | **16** | **14,648** | **235** | **–** | **430** | 91 | 339 |
| 1980 | **Average** | **-13** | **15** | **13,481** | **287** | **–** | [7] **466** | 108 | [7] 358 |
| 1981 | **Average** | **-58** | **5** | **12,470** | **228** | **–** | **594** | 230 | 363 |
| 1982 | **Average** | **-59** | **3** | **11,774** | **236** | **–** | [7] **644** | 294 | [7] 350 |
| 1983 | **Average** | **–** | **2** | **11,685** | **164** | **66** | **723** | 379 | 344 |
| 1984 | **Average** | **–** | **2** | **12,044** | **181** | **64** | **796** | 451 | 345 |
| 1985 | **Average** | **–** | **1** | **12,002** | **204** | **60** | **814** | 493 | 321 |
| 1986 | January | -- | 1 | 12,374 | 159 | 57 | 826 | 494 | 332 |
| | February | -- | (s) | 11,918 | 162 | 56 | 827 | 495 | 332 |
| | March | -- | (s) | 11,652 | 212 | 52 | 838 | 497 | 341 |
| | April | -- | (s) | 12,512 | 94 | 51 | 837 | 499 | 338 |
| | May | -- | (s) | 13,279 | 98 | 49 | 829 | 500 | 329 |
| | June | -- | (s) | 13,261 | 240 | 52 | 828 | 502 | 327 |
| | July | -- | (s) | 12,917 | 65 | 51 | 845 | 503 | 342 |
| | August | -- | (s) | 13,287 | 233 | 48 | 838 | 505 | 333 |
| | September | -- | (s) | 13,097 | 161 | 45 | 844 | 506 | 338 |
| | October | -- | (s) | 12,636 | 151 | 41 | 851 | 508 | 344 |
| | November | -- | (s) | 12,831 | 115 | 41 | 849 | 509 | 339 |
| | December | -- | (s) | 12,777 | 159 | 42 | 843 | 512 | 331 |
| | **Average** | **–** | **(s)** | **12,716** | **154** | **49** | **–** | – | – |
| 1987 | January | -- | 1 | 12,570 | 84 | 41 | 848 | 515 | 333 |
| | February | -- | (s) | 12,290 | 284 | 41 | 849 | 517 | 332 |
| | March | -- | 1 | 12,081 | 150 | 39 | 852 | 520 | 332 |
| | April | -- | (s) | 12,512 | 247 | 41 | 851 | 522 | 329 |
| | May | -- | (s) | 12,653 | 69 | 42 | 850 | 525 | 325 |
| | June | -- | (s) | 13,202 | 116 | 36 | 855 | 527 | 328 |
| | July | -- | (s) | 13,430 | 149 | 32 | 854 | 530 | 324 |
| | August | -- | (s) | 13,380 | 141 | 31 | 864 | 532 | 332 |
| | September | -- | (s) | 13,168 | 116 | 28 | 871 | 534 | 337 |
| | October | -- | (s) | 12,733 | 84 | 25 | 892 | 536 | 356 |
| | November | -- | (s) | 12,981 | 164 | 25 | 902 | 539 | 364 |
| | December | -- | (s) | 13,212 | 220 | 31 | 890 | 541 | 349 |
| | **Average** | **--** | **(s)** | **12,854** | **151** | **34** | -- | -- | -- |
| 1988 | January | -- | (s) | 12,975 | 212 | 36 | 888 | 543 | 345 |
| | February | -- | (s) | 12,715 | 149 | 52 | 892 | 544 | 348 |
| | March | -- | (s) | 13,072 | 218 | 52 | 899 | 545 | 354 |
| | April | -- | (s) | 13,167 | 117 | 42 | 904 | 547 | 357 |
| | May | -- | (s) | 13,472 | 141 | 34 | 906 | 548 | 358 |
| | June | -- | (s) | 13,528 | 141 | 32 | 909 | 550 | 359 |
| | July | -- | (s) | 13,663 | 191 | 29 | 901 | 551 | 349 |
| | August | -- | (s) | 13,797 | 155 | 30 | 885 | 552 | 333 |
| | September | -- | (s) | 13,309 | 122 | 37 | 883 | 555 | 328 |
| | October | -- | (s) | 13,188 | 171 | 42 | 896 | 556 | 340 |
| | November* | -- | (s) | R 13,196 | R 151 | R 44 | R 896 | 559 | R 337 |
| | December** | -- | E (s) | E *13,423* | E 147 | E 40 | E *892* | E *560* | E *333* |
| | **12-Mo. Average** | **--** | E **(s)** | E **13,295** | E **160** | E **39** | -- | -- | -- |
| 1987 | **12-Mo. Average** | **--** | **(s)** | **12,854** | **151** | **34** | -- | -- | -- |
| 1986 | **12-Mo. Average** | **--** | **(s)** | **12,716** | **154** | **49** | -- | -- | -- |

Footnotes continued.

R = Revised data. (s) = Less than 500 barrels per day. E = Estimated. PE = Preliminary estimate. RE = Revised estimate.

* See Explanatory Note 9.2.

** Italics denote estimates based upon preliminary data. See Explanatory Note 8.

Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: See the last page of this section.

## Table S3. Crude Oil and Petroleum Product Imports

| | | Imports from OPEC Sources [1] | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Algeria | Libya | Saudi Arabia[2] | United Arab Emirates | Indonesia | Iran | Nigeria | Venezuela | Other OPEC [2] | Total OPEC[3] | Total Arab OPEC [4] |
| | | Thousand Barrels per Day | | | | | | | | | | |
| **1973** | **Average** | **136** | **164** | **486** | **71** | **213** | **223** | **459** | **1,135** | **106** | **2,993** | **915** |
| **1974** | **Average** | **190** | **4** | **461** | **74** | **300** | **469** | **713** | **979** | **88** | **3,280** | **752** |
| **1975** | **Average** | **282** | **232** | **715** | **117** | **390** | **280** | **762** | **702** | **122** | **3,601** | **1,383** |
| **1976** | **Average** | **432** | **453** | **1,230** | **254** | **539** | **298** | **1,025** | **700** | **134** | **5,066** | **2,424** |
| **1977** | **Average** | **559** | **723** | **1,380** | **335** | **541** | **535** | **1,143** | **690** | **287** | **6,193** | **3,185** |
| **1978** | **Average** | **649** | **654** | **1,144** | **385** | **573** | **555** | **919** | **645** | **226** | **5,751** | **2,963** |
| **1979** | **Average** | **636** | **658** | **1,356** | **281** | **420** | **304** | **1,080** | **690** | **212** | **5,637** | **3,056** |
| **1980** | **Average** | **488** | **554** | **1,261** | **172** | **348** | **9** | **857** | **481** | **130** | **4,300** | **2,551** |
| **1981** | **Average** | **311** | **319** | **1,129** | **81** | **366** | **0** | **620** | **406** | **90** | **3,323** | **1,848** |
| **1982** | **Average** | **170** | **26** | **552** | **92** | **248** | **35** | **514** | **412** | **97** | **2,146** | **854** |
| **1983** | **Average** | **240** | **0** | **337** | **30** | **338** | **48** | **302** | **422** | **144** | **1,862** | **632** |
| **1984** | **Average** | **323** | **1** | **325** | **117** | **343** | **10** | **216** | **548** | **166** | **2,049** | **819** |
| **1985** | **Average** | **187** | **4** | **168** | **45** | **314** | **27** | **293** | **605** | **187** | **1,830** | **472** |
| **1986** | January | 215 | 0 | 664 | 11 | 290 | 0 | 278 | 629 | 210 | 2,298 | 976 |
| | February | 157 | 0 | 574 | 0 | 290 | (s) | 204 | 518 | 64 | 1,807 | 757 |
| | March | 260 | 0 | 482 | 0 | 161 | 0 | 328 | 797 | 117 | 2,145 | 798 |
| | April | 275 | 0 | 698 | 21 | 292 | 0 | 319 | 831 | 139 | 2,576 | 1,058 |
| | May | 193 | 0 | 574 | 40 | 314 | 40 | 398 | 899 | 290 | 2,749 | 966 |
| | June | 319 | 0 | 662 | 83 | 353 | 0 | 382 | 772 | 439 | 3,010 | 1,377 |
| | July | 310 | 0 | 738 | 59 | 532 | 66 | 542 | 730 | 330 | 3,307 | 1,357 |
| | August | 363 | 0 | 680 | 37 | 274 | 93 | 606 | 916 | 378 | 3,346 | 1,339 |
| | September | 245 | 0 | 810 | 62 | 341 | 31 | 684 | 856 | 356 | 3,383 | 1,388 |
| | October | 305 | 0 | 697 | 147 | 388 | 0 | 530 | 863 | 346 | 3,276 | 1,387 |
| | November | 311 | 0 | 868 | 34 | 335 | 0 | 483 | 843 | 214 | 3,088 | 1,295 |
| | December | 291 | 0 | 769 | 30 | 251 | 0 | 511 | 841 | 284 | 2,976 | 1,223 |
| | **Average** | **271** | **0** | **685** | **44** | **318** | **19** | **440** | **793** | **265** | **2,837** | **1,162** |
| **1987** | January | 156 | 0 | 875 | 15 | 254 | 0 | 346 | 899 | 218 | 2,764 | 1,184 |
| | February | 307 | 0 | 776 | 54 | 418 | 30 | 256 | 791 | 155 | 2,785 | 1,222 |
| | March | 334 | 0 | 430 | 0 | 317 | 73 | 312 | 702 | 135 | 2,305 | 843 |
| | April | 323 | 0 | 463 | 62 | 236 | 47 | 512 | 710 | 77 | 2,430 | 866 |
| | May | 196 | 0 | 499 | 26 | 297 | 75 | 550 | 913 | 119 | 2,675 | 775 |
| | June | 247 | 0 | 782 | 45 | 261 | 165 | 546 | 808 | 268 | 3,122 | 1,275 |
| | July | 347 | 0 | 756 | 42 | 349 | 237 | 792 | 854 | 157 | 3,533 | 1,264 |
| | August | 250 | 0 | 961 | 103 | 312 | 208 | 732 | 831 | 351 | 3,748 | 1,611 |
| | September | 378 | 0 | 902 | 146 | 242 | 193 | 615 | 821 | 263 | 3,560 | 1,640 |
| | October | 274 | 0 | 1,051 | 111 | 305 | 86 | 518 | 829 | 401 | 3,576 | 1,713 |
| | November | 395 | 0 | 637 | 97 | 219 | 41 | 607 | 771 | 402 | 3,169 | 1,477 |
| | December | 339 | 0 | 876 | 31 | 216 | 23 | 613 | 717 | 220 | 3,033 | 1,415 |
| | **Average** | **295** | **0** | **751** | **61** | **285** | **98** | **535** | **804** | **231** | **3,060** | **1,274** |
| **1988** | January | 312 | 0 | 849 | 61 | 179 | [5] 1 | 406 | 752 | 540 | 3,100 | 1,632 |
| | February | 358 | 0 | 1,265 | 79 | 148 | 0 | 501 | 830 | 214 | 3,394 | 1,883 |
| | March | 259 | 0 | 934 | 6 | 123 | 0 | 541 | 790 | 352 | 3,006 | 1,506 |
| | April | 342 | 0 | 931 | 48 | 166 | 0 | 651 | 812 | 385 | 3,335 | 1,613 |
| | May | 320 | 0 | 1,034 | 34 | 298 | 0 | 488 | 835 | 354 | 3,363 | 1,710 |
| | June | 262 | 0 | 923 | 11 | 158 | 0 | 703 | 839 | 495 | 3,391 | 1,603 |
| | July | 193 | 0 | 1,076 | 43 | 198 | 0 | 614 | 706 | 609 | 3,439 | 1,897 |
| | August | 253 | 0 | 1,161 | 0 | 153 | 0 | 557 | 809 | 669 | 3,603 | 2,024 |
| | September | 274 | 0 | 1,048 | 22 | 231 | 0 | 528 | 803 | 697 | 3,603 | 2,009 |
| | October | 326 | 0 | 1,244 | 16 | 216 | 0 | 686 | 758 | 539 | 3,785 | 2,056 |
| | November | 322 | 0 | 986 | 0 | 227 | 0 | 471 | 752 | 694 | 3,452 | 1,914 |
| | **11-Mo. Average** | **292** | **0** | **1,041** | **29** | **191** | **(s)** | **559** | **789** | **505** | **3,406** | **1,804** |
| **1987** | **11-Mo. Average** | **291** | **0** | **740** | **64** | **291** | **105** | **528** | **812** | **232** | **3,063** | **1,261** |
| **1986** | **11-Mo. Average** | **269** | **0** | **677** | **45** | **325** | **21** | **434** | **789** | **264** | **2,824** | **1,156** |

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[1] Excludes petroleum imported into the United States indirectly from members of the Organization of Petroleum Exporting Countries (OPEC), primarily from Caribbean and West European areas, as petroleum products that were refined from crude oil produced by OPEC.

[2] The other members of OPEC are Ecuador, Gabon, Iraq, Kuwait, and Qatar. Prior to January 1988, imports from the Neutral Zone between Kuwait and Saudi Arabia are included in imports from Saudi Arabia. From January 1988 forward, those imports are included in imports from "Other OPEC".

[3] "Total OPEC" consists of Ecuador, Gabon, Indonesia, Iran, Nigeria, and Venezuela, as well as the Arab members. Imports from the Neutral Zone between Kuwait and Saudi Arabia are included in imports from "Total OPEC".

[4] The Arab members of OPEC are Algeria, Iraq, Kuwait, Libya, Qatar, Saudi Arabia, and the United Arab Emirates.

[5] A small amount of Iranian crude oil entered the United States (defined in this publication as the 50 States and the District of Columbia) in January 1988 from the Virgin Islands. This oil originated in Iran and was exported to the Virgin Islands prior to the signing of Executive Order 12613 on October 29, 1987.

Footnotes continued on following page.

## Table S3. Crude Oil and Petroleum Product Imports (Continued)

| | | Imports from Non-OPEC Sources[6] | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Bahamas | Canada | Mexico | Netherlands Antilles | Trinidad and Tobago | United Kingdom | Puerto Rico | Virgin Islands | Other Non-OPEC | Total Non-OPEC | Total Imports |
| | | Thousand Barrels per Day | | | | | | | | | | |
| 1973 | Average | 174 | 1,325 | 16 | 585 | 255 | 15 | 99 | 329 | 465 | 3,263 | 6,256 |
| 1974 | Average | 164 | 1,070 | 8 | 511 | 251 | 8 | 90 | 391 | 340 | 2,832 | 6,112 |
| 1975 | Average | 152 | 846 | 71 | 332 | 242 | 14 | 90 | 406 | 300 | 2,454 | 6,056 |
| 1976 | Average | 118 | 599 | 87 | 275 | 274 | 31 | 88 | 422 | 353 | 2,247 | 7,313 |
| 1977 | Average | 171 | 517 | 179 | 211 | 289 | 126 | 105 | 466 | 550 | 2,614 | 8,807 |
| 1978 | Average | 160 | 467 | 318 | 229 | 253 | 180 | 94 | 429 | 484 | 2,613 | 8,363 |
| 1979 | Average | 147 | 538 | 439 | 231 | 190 | 202 | 92 | 431 | 548 | 2,819 | 8,456 |
| 1980 | Average | 78 | 455 | 533 | 225 | 176 | 176 | 88 | 388 | 491 | 2,609 | 6,909 |
| 1981 | Average | 74 | 447 | 522 | 197 | 133 | 375 | 62 | 327 | 534 | 2,672 | 5,996 |
| 1982 | Average | 65 | 482 | 685 | 175 | 112 | 456 | 50 | 316 | 627 | 2,968 | 5,113 |
| 1983 | Average | 125 | 547 | 826 | 189 | 96 | 382 | 40 | 282 | 701 | 3,189 | 5,051 |
| 1984 | Average | 88 | 630 | 748 | 188 | 94 | 402 | 42 | 294 | 902 | 3,388 | 5,437 |
| 1985 | Average | 40 | 770 | 816 | 40 | 113 | 310 | 28 | 247 | 873 | 3,237 | 5,067 |
| 1986 | January | 62 | 823 | 681 | 58 | 108 | 333 | 21 | 326 | 862 | 3,275 | 5,573 |
| | February | 33 | 690 | 557 | 11 | 85 | 218 | 18 | 309 | 949 | 2,870 | 4,676 |
| | March | 18 | 750 | 616 | 27 | 79 | 178 | 25 | 186 | 688 | 2,567 | 4,712 |
| | April | 34 | 798 | 694 | 13 | 111 | 188 | 23 | 209 | 793 | 2,863 | 5,439 |
| | May | 32 | 881 | 743 | 37 | 130 | 365 | 27 | 237 | 1,199 | 3,651 | 6,400 |
| | June | 29 | 753 | 884 | 17 | 167 | 569 | 30 | 233 | 1,157 | 3,838 | 6,848 |
| | July | 44 | 763 | 850 | 25 | 131 | 353 | 29 | 237 | 1,202 | 3,634 | 6,942 |
| | August | 39 | 801 | 738 | 12 | 133 | 584 | 7 | 214 | 1,294 | 3,822 | 7,168 |
| | September | 15 | 801 | 615 | 17 | 162 | 437 | 23 | 291 | 1,345 | 3,706 | 7,090 |
| | October | 38 | 842 | 680 | 26 | 112 | 173 | 21 | 215 | 1,043 | 3,151 | 6,427 |
| | November | 39 | 960 | 565 | 53 | 129 | 448 | 21 | 179 | 1,111 | 3,504 | 6,592 |
| | December | 57 | 809 | 746 | 7 | 148 | 351 | 12 | 291 | 1,304 | 3,724 | 6,700 |
| | **Average** | **37** | **807** | **699** | **25** | **125** | **350** | **21** | **244** | **1,080** | **3,387** | **6,224** |
| 1987 | January | 59 | 799 | 689 | 29 | 100 | 384 | 33 | 327 | 1,170 | 3,589 | 6,353 |
| | February | 56 | 783 | 692 | 23 | 127 | 260 | 24 | 296 | 938 | 3,199 | 5,984 |
| | March | 43 | 738 | 721 | 14 | 124 | 322 | 17 | 247 | 1,262 | 3,489 | 5,794 |
| | April | 43 | 818 | 679 | 12 | 123 | 485 | 24 | 259 | 1,037 | 3,481 | 5,911 |
| | May | 31 | 884 | 541 | 33 | 117 | 392 | 21 | 214 | 1,164 | 3,398 | 6,073 |
| | June | 22 | 912 | 664 | 13 | 114 | 377 | 21 | 281 | 1,242 | 3,646 | 6,769 |
| | July | 46 | 901 | 680 | 71 | 98 | 354 | 17 | 288 | 1,598 | 4,055 | 7,588 |
| | August | 27 | 841 | 577 | 51 | 100 | 289 | 20 | 274 | 1,526 | 3,706 | 7,454 |
| | September | 48 | 846 | 705 | 42 | 105 | 259 | 25 | 271 | 1,318 | 3,618 | 7,178 |
| | October | 26 | 938 | 697 | 16 | 88 | 321 | 17 | 250 | 1,138 | 3,492 | 7,068 |
| | November | 31 | 827 | 627 | 14 | 111 | 456 | 15 | 235 | 1,585 | 3,899 | 7,068 |
| | December | 10 | 883 | 591 | 24 | 73 | 324 | 23 | 327 | 1,543 | 3,800 | 6,833 |
| | **Average** | **37** | **848** | **655** | **29** | **106** | **352** | **21** | **272** | **1,296** | **3,617** | **6,678** |
| 1988 | January | 49 | 953 | 767 | 40 | 104 | 312 | 29 | 341 | 1,205 | 3,800 | 6,900 |
| | February | 58 | 995 | 699 | 21 | 93 | 313 | 16 | 200 | 1,206 | 3,601 | 6,995 |
| | March | 45 | 989 | 745 | 30 | 89 | 461 | 22 | 180 | 1,160 | 3,720 | 6,727 |
| | April | 12 | 975 | 674 | 31 | 82 | 581 | 29 | 193 | 1,137 | 3,714 | 7,050 |
| | May | 17 | 990 | 718 | 38 | 102 | 383 | 20 | 243 | 1,345 | 3,855 | 7,218 |
| | June | 25 | 1,022 | 765 | 19 | 112 | 232 | 13 | 212 | 1,094 | 3,494 | 6,885 |
| | July | 15 | 962 | 723 | 35 | 96 | 208 | 22 | 215 | 1,280 | 3,556 | 6,994 |
| | August | 12 | 1,003 | 692 | 20 | 97 | 104 | 7 | 172 | 1,465 | 3,571 | 7,174 |
| | September | 25 | 920 | 842 | 13 | 95 | 148 | 29 | 236 | 1,307 | 3,617 | 7,220 |
| | October | 11 | 939 | 743 | 17 | 98 | 447 | 21 | 234 | 1,370 | 3,881 | 7,666 |
| | November | 27 | 985 | 811 | 59 | 73 | 245 | 28 | 286 | 1,578 | 4,092 | 7,544 |
| | **11-Mo. Average** | **27** | **976** | **744** | **29** | **95** | **312** | **21** | **228** | **1,287** | **3,719** | **7,125** |
| 1987 | **11-Mo. Average** | **39** | **845** | **661** | **29** | **110** | **355** | **21** | **267** | **1,274** | **3,600** | **6,663** |
| 1986 | **11-Mo. Average** | **35** | **806** | **694** | **27** | **123** | **350** | **22** | **239** | **1,059** | **3,356** | **6,179** |

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Footnotes continued.

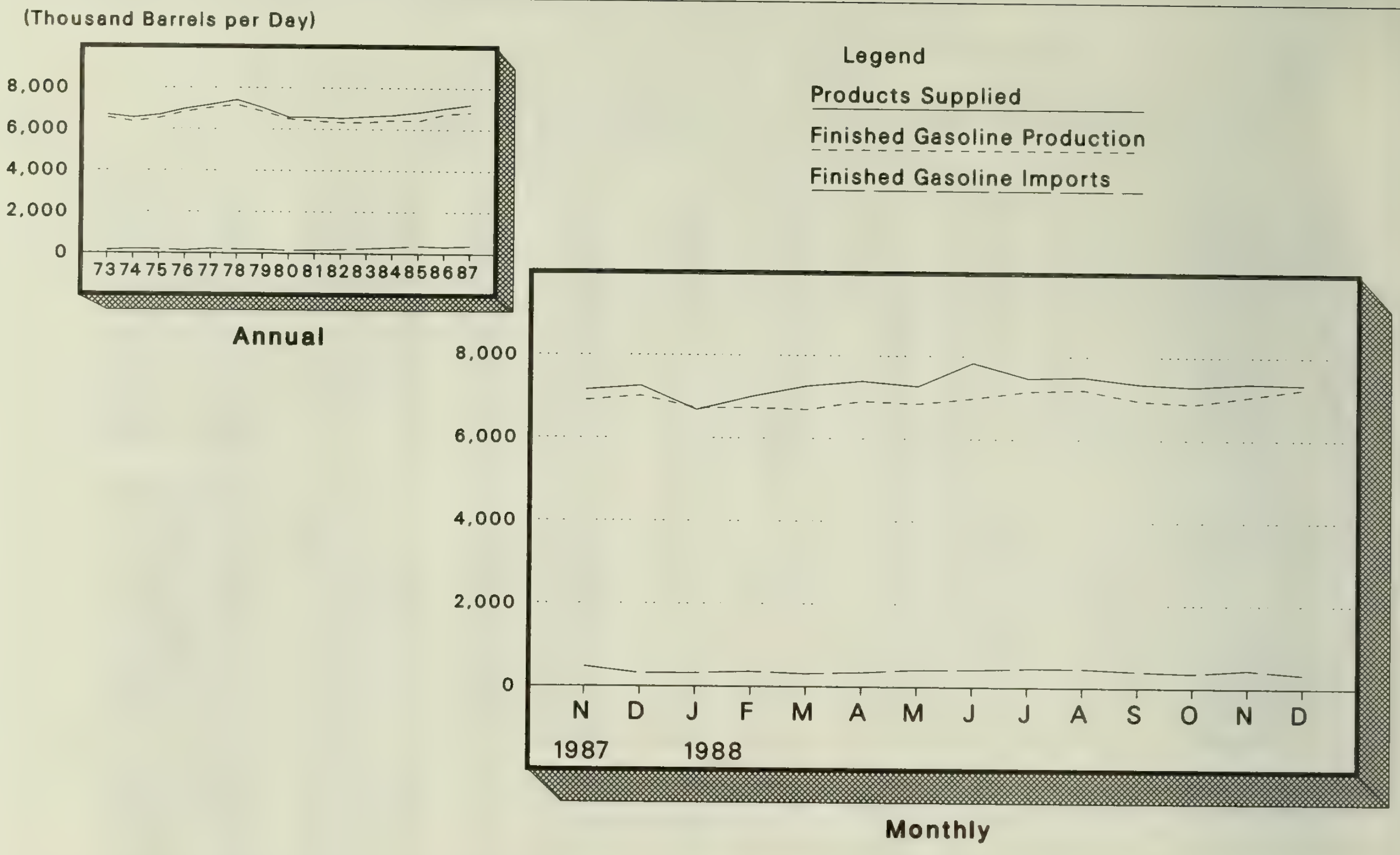
[6] Includes petroleum imported into the United States indirectly from members of OPEC, primarily from Caribbean and West European areas as petroleum products that were refined from crude oil produced by OPEC.

(s) = Less than 500 barrels per day.

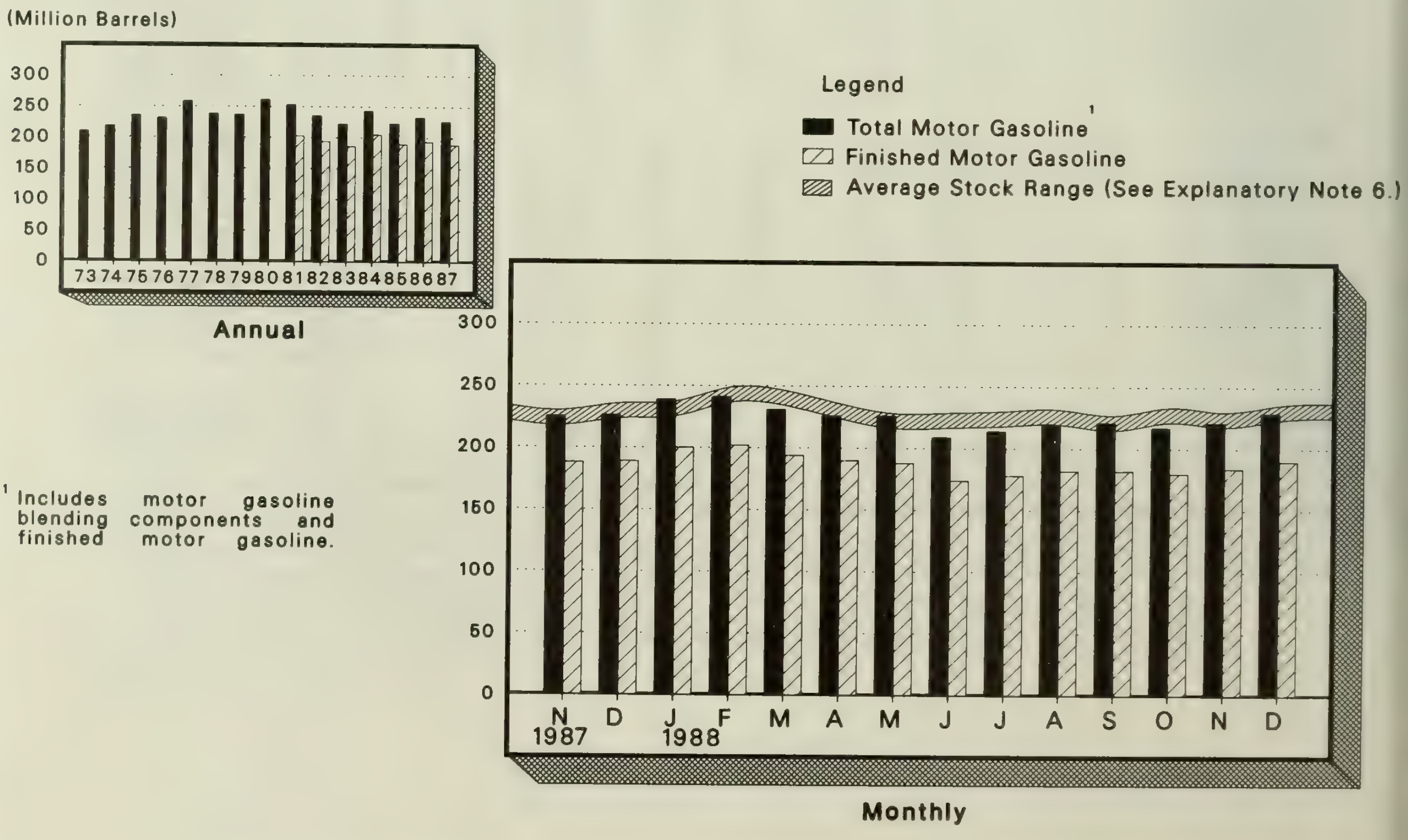
Notes: • Beginning in October 1977, Strategic Petroleum Reserve imports are included. • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: See the last page of this section.

## Figure S5. Finished Motor Gasoline Supply and Disposition



## Figure S6. Motor Gasoline Ending Stocks



[1] Includes motor gasoline blending components and finished motor gasoline.

## Table S4. Finished Motor Gasoline Supply and Disposition

| | | Supply | | | Disposition | | | | Ending Stocks [1] | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Product Supplied | | | | |
| | | Total Production | Imports [2] | Stock Withdrawal [2,3] | Exports | Total [4] | Unleaded | Unleaded | Total Motor Gasoline [5] | Finished Motor Gasoline |
| | | Thousand Barrels per Day | | | | | | Percent of Total | Million Barrels | |
| **1973** | **Average** | **6,535** | **134** | **9** | **4** | **6,674** | -- | -- | 209 | -- |
| **1974** | **Average** | **6,360** | **204** | **-24** | **2** | **6,537** | -- | -- | [6] 218 | -- |
| **1975** | **Average** | **6,520** | **184** | [6] **-28** | **2** | **6,675** | -- | -- | 235 | -- |
| **1976** | **Average** | **6,841** | **131** | **10** | **3** | **6,978** | -- | -- | 231 | -- |
| **1977** | **Average** | **7,033** | **217** | **-72** | **2** | **7,177** | **1,976** | **27.5** | 258 | -- |
| **1978** | **Average** | **7,169** | **190** | **54** | **1** | **7,412** | **2,521** | **34.0** | 238 | -- |
| **1979** | **Average** | **6,852** | **181** | **2** | **(s)** | **7,034** | **2,798** | **39.8** | 237 | -- |
| **1980** | **Average** | **6,506** | **140** | **-66** | **1** | **6,579** | **3,067** | **46.6** | [6] 261 | -- |
| **1981** | **Average**[7] | **6,405** | **157** | [6] **28** | **2** | **6,588** | **3,264** | **49.5** | 253 | -- |
| **1982** | **Average** | **6,338** | **197** | **25** | **20** | **6,539** | **3,409** | **52.1** | [6] 235 | -- |
| **1983** | **Average** | **6,340** | **247** | [6] **45** | **10** | **6,622** | **3,647** | **55.1** | 222 | 186 |
| **1984** | **Average** | **6,453** | **299** | **-54** | **6** | **6,693** | **3,987** | **59.6** | 243 | 205 |
| **1985** | **Average** | **6,419** | **381** | **41** | **10** | **6,831** | **4,406** | **64.5** | 223 | 190 |
| **1986** | January | 6,522 | 332 | -347 | 6 | 6,502 | 4,404 | 67.7 | 238 | 201 |
| | February | 6,302 | 334 | -156 | 11 | 6,469 | 4,365 | 67.5 | 244 | 205 |
| | March | 6,061 | 224 | 691 | 21 | 6,955 | 4,678 | 67.3 | 219 | 184 |
| | April | 6,498 | 291 | 338 | 23 | 7,105 | 4,783 | 67.3 | 207 | 174 |
| | May | 7,095 | 471 | -450 | 9 | 7,106 | 4,729 | 66.5 | 221 | 188 |
| | June | 7,101 | 392 | -265 | 18 | 7,209 | 4,914 | 68.2 | 230 | 196 |
| | July | 6,956 | 337 | 189 | 47 | 7,436 | 5,182 | 69.7 | 224 | 190 |
| | August | 7,092 | 303 | 83 | 43 | 7,435 | 5,138 | 69.1 | 222 | 187 |
| | September | 6,891 | 303 | -289 | 40 | 6,864 | 4,813 | 70.1 | 234 | 196 |
| | October | 6,616 | 322 | 372 | 61 | 7,250 | 5,086 | 70.1 | 222 | 184 |
| | November | 6,895 | 280 | -200 | 96 | 6,879 | 4,918 | 71.5 | 229 | 190 |
| | December | 6,970 | 320 | -122 | 24 | 7,143 | 5,193 | 72.7 | 233 | 194 |
| | **Average** | **6,752** | **326** | **-11** | **33** | **7,034** | **4,854** | **69.0** | -- | -- |
| **1987** | January | 6,714 | 393 | -528 | 44 | 6,535 | 4,822 | 73.8 | 251 | 211 |
| | February | 6,365 | 309 | 144 | 22 | 6,796 | 5,068 | 74.6 | 250 | 207 |
| | March | 6,569 | 364 | 51 | 20 | 6,964 | 5,193 | 74.6 | 248 | 205 |
| | April | 6,850 | 374 | 133 | 42 | 7,314 | 5,405 | 73.9 | 242 | 201 |
| | May | 6,991 | 354 | 164 | 48 | 7,460 | 5,569 | 74.7 | 235 | 196 |
| | June | 7,089 | 385 | 111 | 46 | 7,539 | 5,678 | 75.3 | 230 | 193 |
| | July | 7,043 | 452 | 119 | 33 | 7,581 | 5,740 | 75.7 | 226 | 189 |
| | August | 6,933 | 396 | 29 | 19 | 7,338 | 5,656 | 77.1 | 226 | 188 |
| | September | 6,921 | 421 | -107 | 30 | 7,205 | 5,536 | 76.8 | 230 | 191 |
| | October | 6,668 | 356 | 302 | 21 | 7,305 | 5,636 | 77.1 | 218 | 182 |
| | November | 6,907 | 484 | -208 | 32 | 7,151 | 5,589 | 78.2 | 225 | 188 |
| | December | 7,015 | 320 | -24 | 59 | 7,251 | 5,715 | 78.8 | 226 | 189 |
| | **Average** | **6,841** | **384** | **15** | **35** | **7,206** | **5,470** | **75.9** | -- | -- |
| **1988** | January | 6,723 | 324 | -361 | 8 | 6,679 | 5,392 | 80.7 | 239 | 200 |
| | February | 6,736 | 365 | -78 | 18 | 7,004 | 5,571 | 79.5 | 241 | 202 |
| | March | 6,695 | 318 | 271 | 18 | 7,265 | 5,845 | 80.4 | 231 | 194 |
| | April | 6,906 | 349 | 148 | 18 | 7,384 | 5,946 | 80.5 | 226 | 190 |
| | May | 6,847 | 415 | 34 | 28 | 7,269 | 5,813 | 80.0 | 226 | 188 |
| | June | 6,983 | 424 | 490 | 59 | 7,838 | 6,356 | 81.1 | 209 | 174 |
| | July | 7,159 | 461 | -135 | 12 | 7,473 | 6,126 | 82.0 | 214 | 178 |
| | August | 7,204 | 465 | -142 | 15 | 7,511 | 6,191 | 82.4 | 219 | 182 |
| | September | 6,948 | 403 | 14 | 16 | 7,349 | 6,066 | 82.5 | 221 | 182 |
| | October | 6,875 | 363 | 63 | 13 | 7,287 | 5,992 | 82.2 | 217 | 180 |
| | November* | R 7,057 | R 451 | R -124 | R 15 | R 7,369 | R 6,149 | R 83.4 | R 221 | R 184 |
| | December** | E *7,248* | E *343* | E *-234* | E 14 | E *7,342* | E *6,306* | E *85.9* | E *229* | E *190* |
| | **12-Mo. Average** | E **6,949** | E **390** | E **-6** | E **19** | E **7,314** | E **5,980** | E **81.8** | -- | -- |
| **1987** | **12-Mo. Average** | **6,841** | **384** | **15** | **35** | **7,206** | **5,470** | **75.9** | -- | -- |
| **1986** | **12-Mo. Average** | **6,752** | **326** | **-11** | **33** | **7,034** | **4,854** | **69.0** | -- | -- |

---

[1] Stocks are totals as of end of period.

[2] Beginning in 1981, excludes blending components.

[3] A negative number indicates an increase in stocks and a positive number indicates a decrease.

[4] Includes gasohol.

[5] Includes motor gasoline blending components.

[6] In January 1975, 1981, and 1983, numerous respondents were added to surveys affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10.

[7] Beginning in January 1981, survey forms were modified. See Explanatory Note 12.

R = Revised data. (s) = Less than 500 barrels per day. E = Estimated.

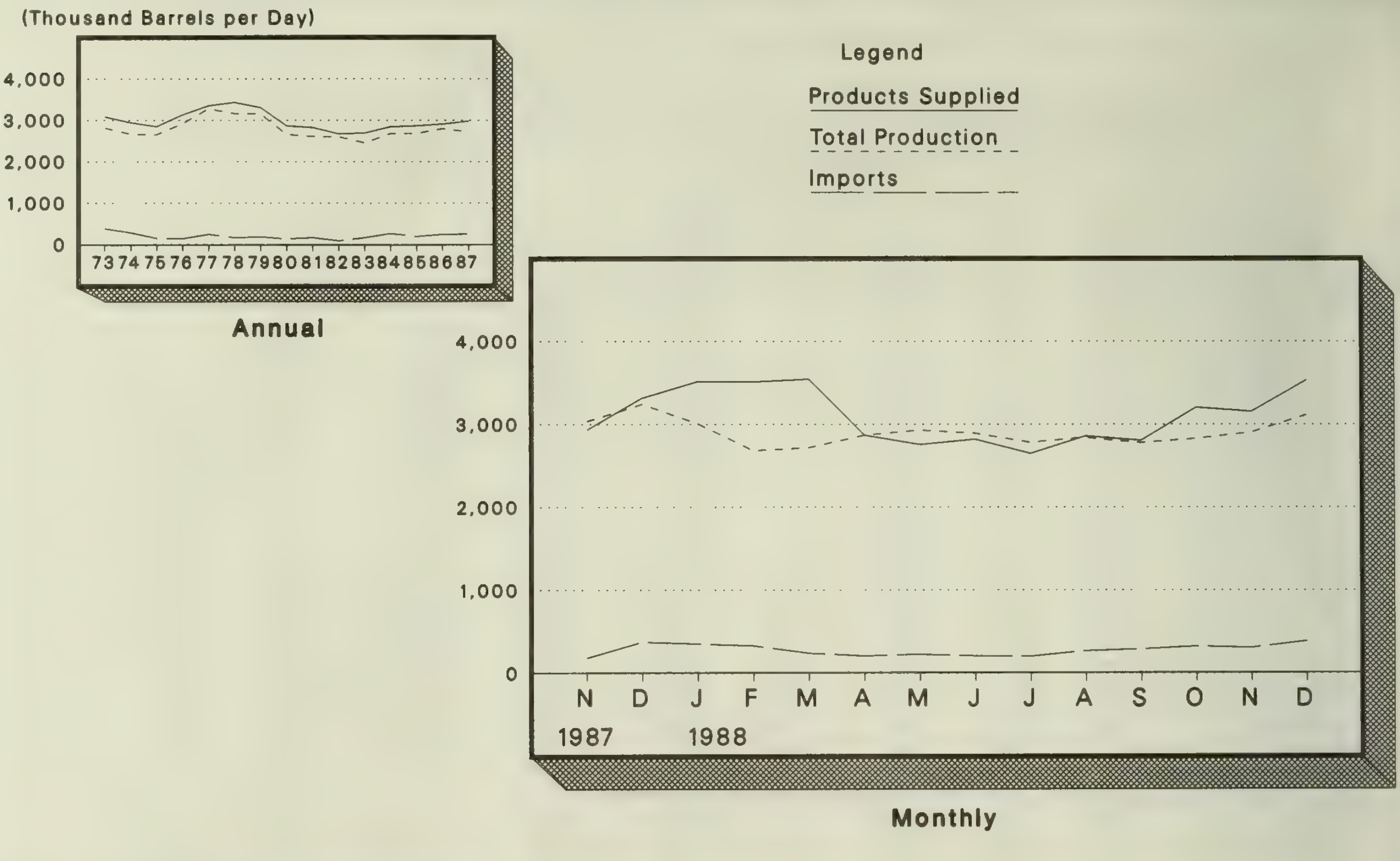
* See Explanatory Note 9.3.

** Italics denote estimates based upon preliminary data. See Explanatory Note 8.

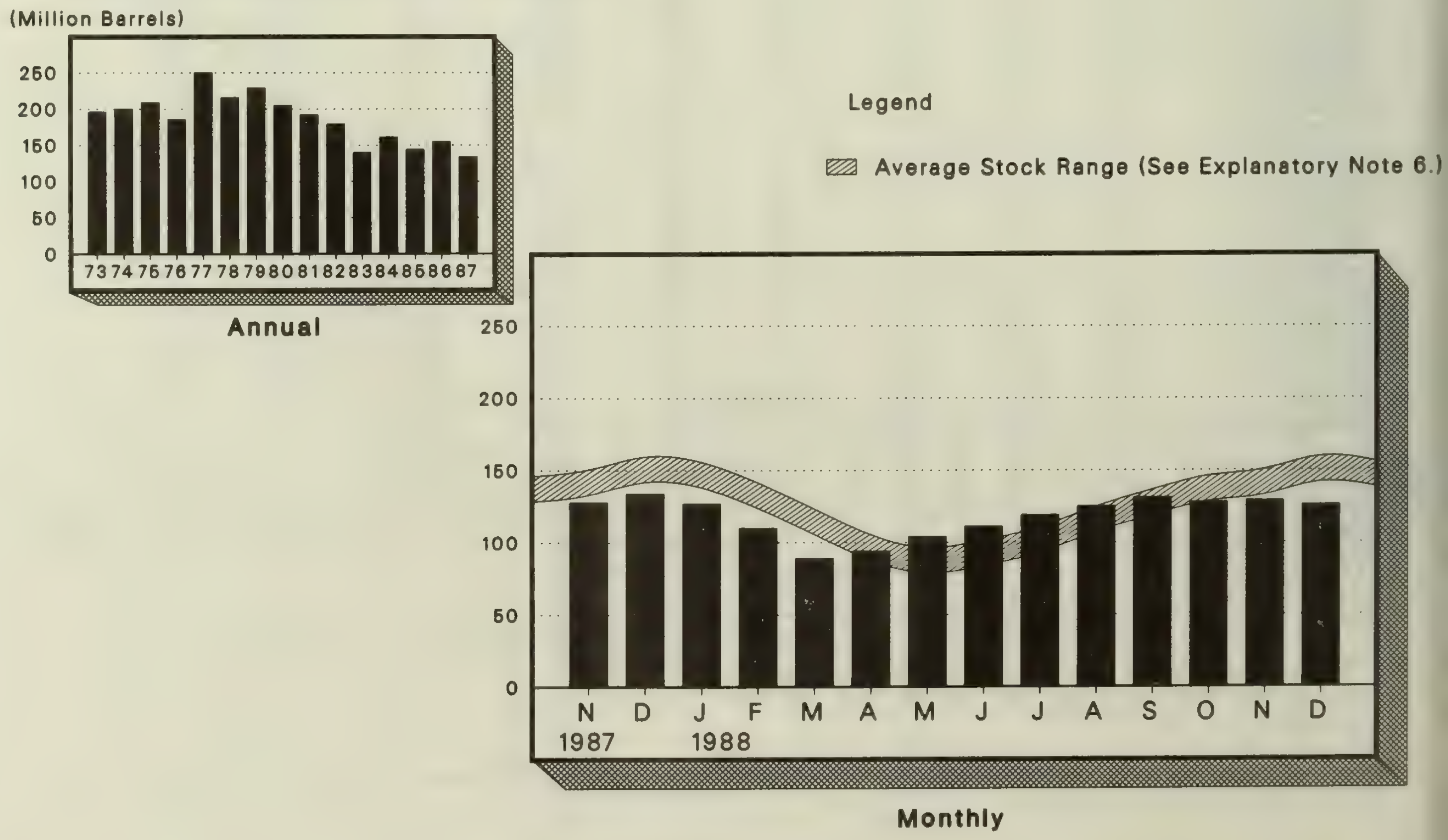
Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: See the last page of this section.

## Figure S7. Distillate Fuel Oil Supply and Disposition



## Figure S8. Distillate Fuel Oil Ending Stocks



## Table S5. Distillate Fuel Oil Supply and Disposition

| | | Supply | | | | Disposition | | |
|---|---|---|---|---|---|---|---|---|
| | | Total Production | Imports | Stock Withdrawal [1] | Crude Used Directly [2] | Exports | Product Supplied [2] | Ending Stocks [3] |
| | | Thousand Barrels per Day | | | | | | Million Barrels |
| **1973** | **Average** | **2,822** | **392** | **-115** | **2** | **9** | **3,092** | 196 |
| **1974** | **Average** | **2,669** | **289** | **-9** | **2** | **2** | **2,948** | [4] 200 |
| **1975** | **Average** | **2,654** | **155** | [4] **40** | **2** | **1** | **2,851** | 209 |
| **1976** | **Average** | **2,924** | **146** | **62** | **1** | **1** | **3,133** | 186 |
| **1977** | **Average** | **3,278** | **250** | **-176** | **1** | **1** | **3,352** | 250 |
| **1978** | **Average** | **3,167** | **173** | **93** | **1** | **3** | **3,432** | 216 |
| **1979** | **Average** | **3,153** | **193** | **-34** | **1** | **3** | **3,311** | 229 |
| **1980** | **Average** | **2,662** | **142** | **64** | **1** | **3** | **2,866** | [4] 205 |
| **1981** | **Average**[5] | **2,613** | **173** | [4] **38** | **10** | **5** | **2,829** | 192 |
| **1982** | **Average** | **2,606** | **93** | **35** | **10** | **74** | **2,671** | [4] 179 |
| **1983** | **Average** | **2,456** | **174** | [4] **124** | **--** | **64** | **2,690** | 140 |
| **1984** | **Average** | **2,681** | **272** | **-57** | **--** | **51** | **2,845** | 161 |
| **1985** | **Average** | **2,687** | **200** | **48** | **--** | **67** | **2,868** | 144 |
| **1986** | January | 2,899 | 325 | 232 | -- | 126 | 3,330 | 136 |
| | February | 2,563 | 169 | 860 | -- | 176 | 3,416 | 112 |
| | March | 2,643 | 217 | 438 | -- | 131 | 3,168 | 99 |
| | April | 2,788 | 147 | 97 | -- | 128 | 2,904 | 96 |
| | May | 2,858 | 149 | -95 | -- | 149 | 2,762 | 99 |
| | June | 2,729 | 169 | -301 | -- | 53 | 2,544 | 108 |
| | July | 2,710 | 313 | -355 | -- | 75 | 2,592 | 119 |
| | August | 2,922 | 370 | -607 | -- | 64 | 2,621 | 138 |
| | September | 2,865 | 262 | -489 | -- | 98 | 2,540 | 152 |
| | October | 2,717 | 243 | 25 | -- | 74 | 2,912 | 152 |
| | November | 2,917 | 254 | -222 | -- | 72 | 2,877 | 158 |
| | December | 2,943 | 339 | 102 | -- | 55 | 3,329 | 155 |
| | **Average** | **2,798** | **247** | **-31** | **--** | **100** | **2,914** | -- |
| **1987** | January | 2,759 | 222 | 444 | -- | 115 | 3,310 | 141 |
| | February | 2,556 | 253 | 629 | -- | 93 | 3,345 | 124 |
| | March | 2,421 | 297 | 464 | -- | 67 | 3,116 | 109 |
| | April | 2,553 | 192 | 300 | -- | 53 | 2,991 | 100 |
| | May | 2,563 | 203 | -31 | -- | 51 | 2,684 | 101 |
| | June | 2,689 | 265 | -104 | -- | 61 | 2,790 | 104 |
| | July | 2,700 | 381 | -329 | -- | 38 | 2,713 | 115 |
| | August | 2,706 | 222 | -327 | -- | 47 | 2,553 | 125 |
| | September | 2,748 | 222 | -68 | -- | 64 | 2,838 | 127 |
| | October | 2,780 | 237 | 187 | -- | 53 | 3,151 | 121 |
| | November | 3,035 | 187 | -234 | -- | 56 | 2,932 | 128 |
| | December | 3,242 | 378 | -209 | -- | 92 | 3,318 | 134 |
| | **Average** | **2,731** | **255** | **56** | **--** | **66** | **2,976** | -- |
| **1988** | January | 3,008 | 355 | 236 | -- | 82 | 3,517 | 127 |
| | February | 2,683 | 330 | 604 | -- | 107 | 3,511 | 110 |
| | March | 2,720 | 243 | 656 | -- | 74 | 3,544 | 89 |
| | April | 2,869 | 208 | -166 | -- | 42 | 2,870 | 94 |
| | May | 2,931 | 228 | -328 | -- | 74 | 2,757 | 104 |
| | June | 2,893 | 209 | -207 | -- | 76 | 2,820 | 111 |
| | July | 2,783 | 205 | -283 | -- | 58 | 2,647 | 119 |
| | August | 2,844 | 270 | -186 | -- | 70 | 2,860 | 125 |
| | September | 2,779 | 292 | -193 | -- | 72 | 2,806 | 131 |
| | October | 2,830 | 324 | 98 | -- | 48 | 3,204 | 128 |
| | November* | R 2,905 | R 308 | R -26 | -- | R 34 | R 3,153 | 129 |
| | December** | E *3,114* | E *388* | E *91* | -- | E 60 | E *3,533* | E *126* |
| | **12-Mo. Average** | E **2,864** | E **280** | E **23** | **--** | E **66** | E **3,102** | -- |
| **1987** | **12-Mo. Average** | **2,731** | **255** | **56** | **--** | **66** | **2,976** | -- |
| **1986** | **12-Mo. Average** | **2,798** | **247** | **-31** | **--** | **100** | **2,914** | -- |

---

[1] A negative number indicates an increase in stocks and a positive number indicates a decrease.

[2] Beginning in January 1983, product supplied for distillate fuel oil does not include crude oil used directly. See Explanatory Note 4.

[3] Stocks are totals as of end of period.

[4] In January 1975, 1981, and 1983, numerous respondents were added to surveys affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10.

[5] Beginning in January 1981, survey forms were modified. See Explanatory Note 12.

R = Revised data. (s) = Less than 500 barrels per day. E = Estimated.

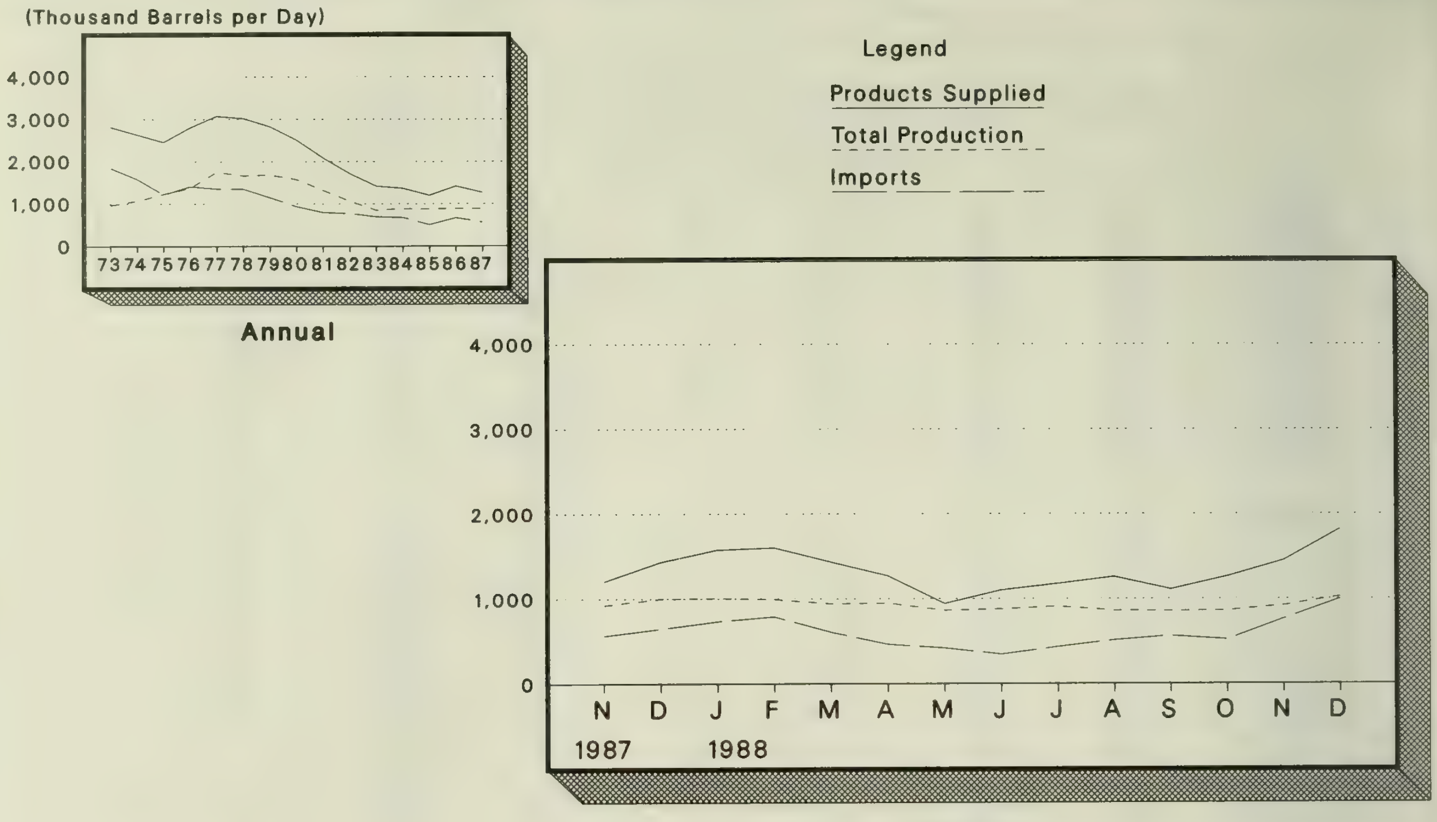
* See Explanatory Note 9.4.

** Italics denote estimates based upon preliminary data. See Explanatory Note 8.

Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: See the last page of this section.

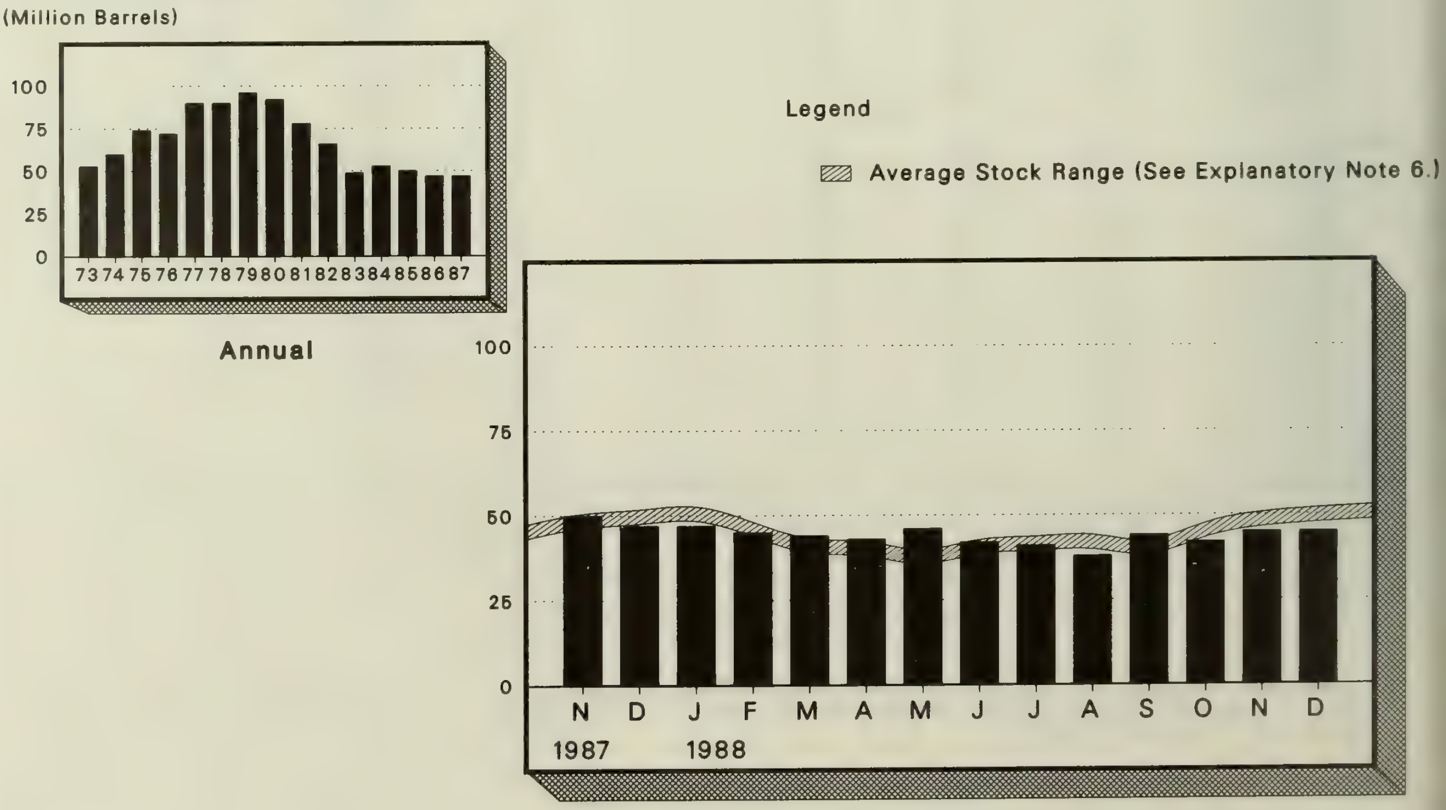
## Figure S9. Residual Fuel Oil Supply and Disposition



Annual

Monthly

## Figure S10. Residual Fuel Oil Ending Stocks



Annual

Monthly

# Table S6. Residual Fuel Oil Supply and Disposition

| | | Supply | | | | Disposition | | |
|---|---|---|---|---|---|---|---|---|
| | | Total Production | Imports | Stock Withdrawal[1] | Crude Used Directly[2] | Exports | Product Supplied[2] | Ending Stocks[3] |
| | | Thousand Barrels per Day | | | | | | Million Barrels |
| **1973** | **Average** | **971** | **1,853** | **5** | **17** | **23** | **2,822** | 53 |
| **1974** | **Average** | **1,070** | **1,587** | **-17** | **13** | **14** | **2,639** | [4] 60 |
| **1975** | **Average** | **1,235** | **1,223** | **[4] 2** | **15** | **15** | **2,462** | 74 |
| **1976** | **Average** | **1,377** | **1,413** | **5** | **17** | **12** | **2,801** | 72 |
| **1977** | **Average** | **1,754** | **1,359** | **-48** | **13** | **6** | **3,071** | 90 |
| **1978** | **Average** | **1,667** | **1,355** | **-1** | **13** | **13** | **3,023** | 90 |
| **1979** | **Average** | **1,687** | **1,151** | **-15** | **12** | **9** | **2,826** | 96 |
| **1980** | **Average** | **1,580** | **939** | **10** | **12** | **33** | **2,508** | [4] 92 |
| **1981** | **Average**[5] | **1,321** | **800** | **[4] 37** | **48** | **118** | **2,088** | 78 |
| **1982** | **Average** | **1,070** | **776** | **32** | **48** | **209** | **1,716** | [4] 66 |
| **1983** | **Average** | **852** | **699** | **[4] 55** | **–** | **185** | **1,421** | 49 |
| **1984** | **Average** | **891** | **681** | **-12** | **–** | **190** | **1,369** | 53 |
| **1985** | **Average** | **882** | **510** | **7** | **–** | **197** | **1,202** | 50 |
| **1986** | January | 940 | 622 | 56 | -- | 211 | 1,407 | 49 |
| | February | 856 | 604 | 200 | -- | 183 | 1,478 | 43 |
| | March | 813 | 626 | 108 | -- | 113 | 1,435 | 40 |
| | April | 933 | 545 | 127 | -- | 202 | 1,402 | 36 |
| | May | 913 | 675 | -114 | -- | 129 | 1,345 | 39 |
| | June | 818 | 712 | -111 | -- | 43 | 1,377 | 43 |
| | July | 850 | 673 | 75 | -- | 90 | 1,508 | 40 |
| | August | 896 | 793 | -29 | -- | 174 | 1,485 | 41 |
| | September | 854 | 641 | -89 | -- | 110 | 1,296 | 44 |
| | October | 827 | 635 | -59 | -- | 144 | 1,259 | 46 |
| | November | 975 | 574 | -15 | -- | 143 | 1,391 | 46 |
| | December | 987 | 913 | -37 | -- | 224 | 1,638 | 47 |
| | **Average** | **889** | **669** | **8** | **--** | **147** | **1,418** | -- |
| **1987** | January | 920 | 701 | 81 | -- | 198 | 1,504 | 45 |
| | February | 825 | 668 | 243 | -- | 221 | 1,515 | 38 |
| | March | 863 | 559 | -38 | -- | 150 | 1,234 | 39 |
| | April | 831 | 476 | 114 | -- | 239 | 1,182 | 36 |
| | May | 813 | 505 | -145 | -- | 144 | 1,029 | 40 |
| | June | 864 | 481 | -33 | -- | 105 | 1,207 | 41 |
| | July | 901 | 721 | -108 | -- | 175 | 1,339 | 45 |
| | August | 882 | 512 | -32 | -- | 185 | 1,176 | 46 |
| | September | 904 | 526 | 42 | -- | 177 | 1,296 | 44 |
| | October | 887 | 414 | -39 | -- | 194 | 1,069 | 46 |
| | November | 928 | 568 | -145 | -- | 146 | 1,205 | 50 |
| | December | 1,001 | 650 | 83 | -- | 300 | 1,434 | 47 |
| | **Average** | **885** | **565** | **(s)** | **--** | **186** | **1,264** | -- |
| **1988** | January | 1,009 | 737 | 23 | -- | 190 | 1,578 | 47 |
| | February | 997 | 792 | 40 | -- | 229 | 1,601 | 45 |
| | March | 944 | 610 | 45 | -- | 165 | 1,434 | 44 |
| | April | 951 | 465 | 27 | -- | 170 | 1,272 | 43 |
| | May | 866 | 423 | -81 | -- | 263 | 945 | 46 |
| | June | 881 | 349 | 121 | -- | 249 | 1,102 | 42 |
| | July | 913 | 436 | 34 | -- | 206 | 1,177 | 41 |
| | August | 863 | 515 | 104 | -- | 225 | 1,258 | 38 |
| | September | 859 | 566 | -213 | -- | 100 | 1,112 | 44 |
| | October | 863 | 522 | 59 | -- | 181 | 1,263 | 42 |
| | November* | R 923 | R 765 | -89 | -- | R 146 | R 1,453 | R 45 |
| | December** | E *1,027* | E *997* | E *-63* | -- | E 142 | E *1,818* | E *45* |
| | **12-Mo. Average** | **E 925** | **E 598** | **E 1** | **--** | **E 189** | **E 1,334** | -- |
| **1987** | **12-Mo. Average** | **885** | **565** | **(s)** | **--** | **186** | **1,264** | -- |
| **1986** | **12-Mo. Average** | **889** | **669** | **8** | **--** | **147** | **1,418** | -- |

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[1] A negative number indicates an increase in stocks and a positive number indicates a decrease.

[2] Beginning in January 1983, product supplied for residual fuel oil does not include crude oil used directly. See Explanatory Note 4.

[3] Stocks are totals as of end of period.

[4] In January 1975, 1981, and 1983, numerous respondents were added to surveys affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10.

[5] Beginning in January 1981, survey forms were modified. See Explanatory Note 12.

R = Revised data. (s) = Less than 500 barrels per day. E = Estimated.

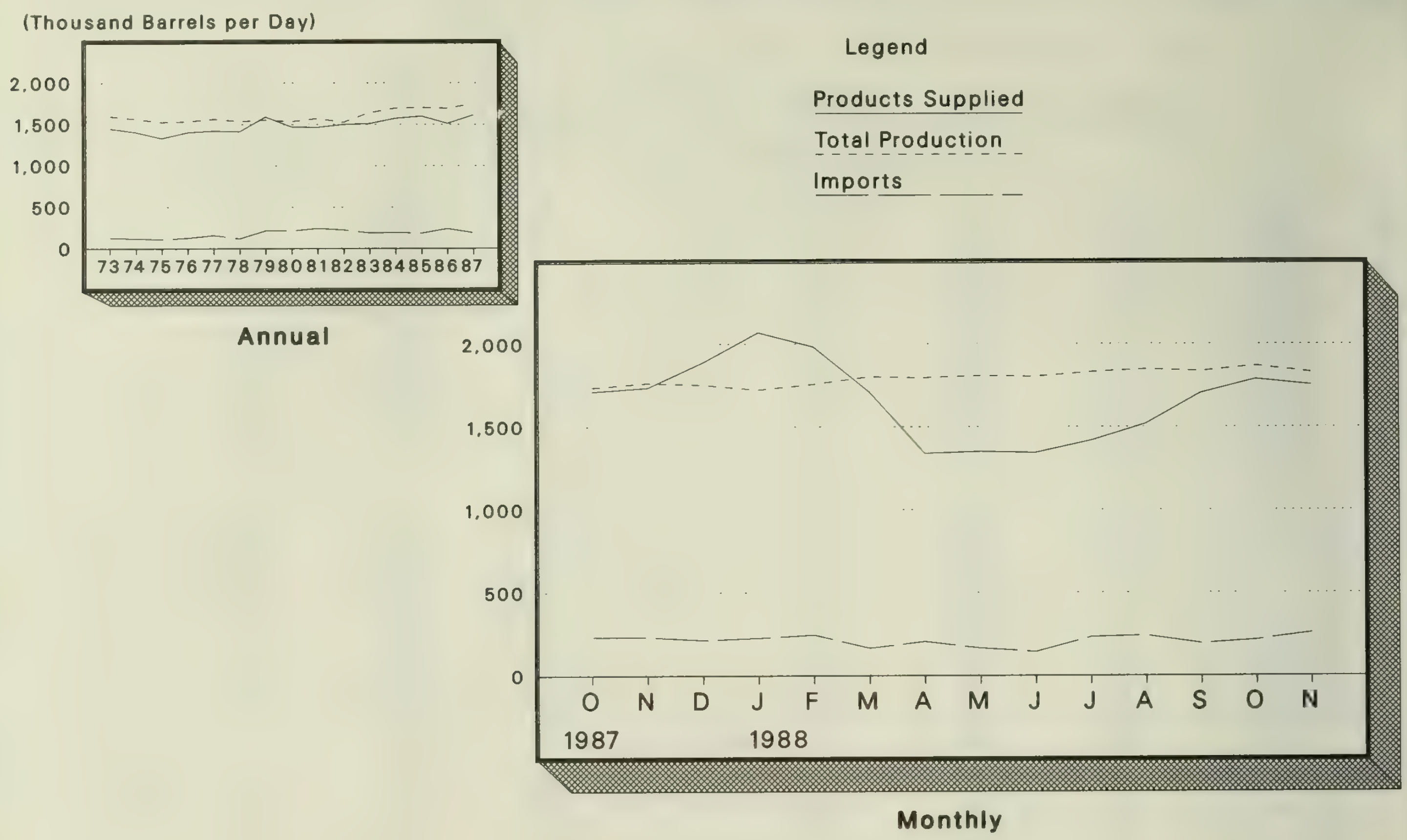
* See Explanatory Note 9.4.

** Italics denote estimates based upon preliminary data. See Explanatory Note 8.

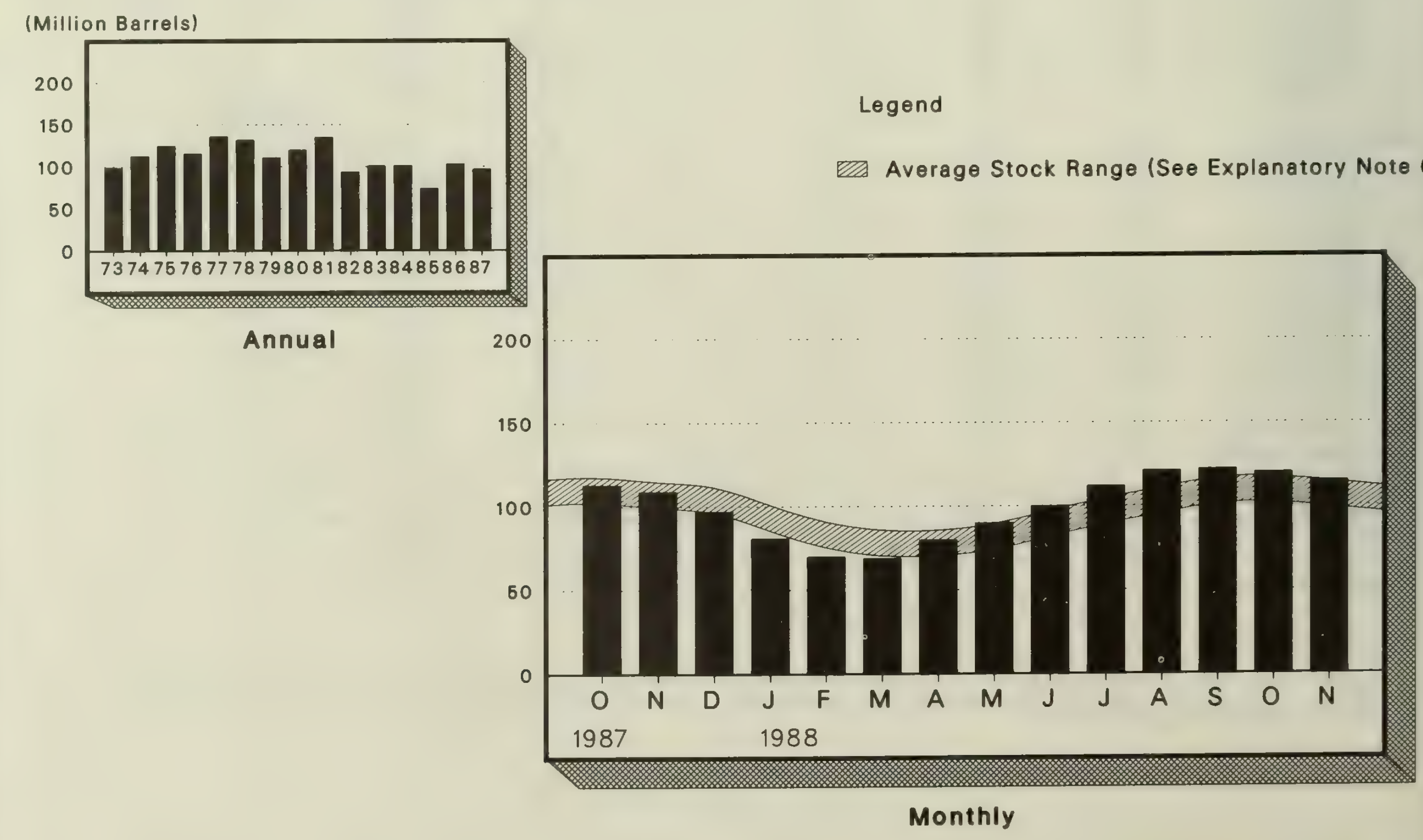
Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: See the last page of this section.

## Figure S11. Liquefied Petroleum Gases Supply and Disposition



## Figure S12. Liquefied Petroleum Gases Ending Stocks



# Table S7. Liquefied Petroleum Gases[1] Supply and Disposition

| | | Supply | | | Disposition | | |
|---|---|---|---|---|---|---|---|
| | | Total Production | Imports | Stock Withdrawal [2] | Refinery Inputs | Exports | Product Supplied | Ending Stocks [3] |
| | | Thousand Barrels per Day | | | | | | Million Barrels |
| 1973 | **Average** | **1,600** | **132** | **-35** | **220** | **27** | **1,449** | 99 |
| 1974 | **Average** | **1,565** | **123** | **-38** | **220** | **25** | **1,406** | [4] 113 |
| 1975 | **Average** | **1,527** | **112** | **[4] -35** | **246** | **26** | **1,333** | 125 |
| 1976 | **Average** | **1,535** | **130** | **24** | **260** | **25** | **1,404** | 116 |
| 1977 | **Average** | **1,566** | **161** | **-55** | **233** | **18** | **1,422** | 136 |
| 1978 | **Average** | **1,537** | **123** | **12** | **239** | **20** | **1,413** | 132 |
| 1979 | **Average** | **1,556** | **217** | **70** | **236** | **15** | **1,592** | 111 |
| 1980 | **Average** | **1,535** | **216** | **-27** | **233** | **21** | **1,469** | [4] 120 |
| 1981 | **Average** | **1,571** | **244** | **[4] -18** | **289** | **42** | **1,466** | 135 |
| 1982 | **Average** | **1,528** | **226** | **111** | **300** | **65** | **1,499** | [4] 94 |
| 1983 | **Average** | **1,642** | **190** | **[4] 4** | **253** | **73** | **1,509** | [4] 101 |
| 1984 | **Average** | **1,697** | **195** | **[4] 19** | **291** | **48** | **1,572** | 101 |
| 1985 | **Average** | **1,704** | **187** | **75** | **304** | **62** | **1,599** | 74 |
| 1986 | January | 1,850 | 280 | 80 | 364 | 47 | 1,800 | 71 |
| | February | 1,815 | 208 | 108 | 325 | 74 | 1,733 | 68 |
| | March | 1,693 | 202 | -98 | 250 | 47 | 1,500 | 71 |
| | April | 1,642 | 134 | -200 | 256 | 33 | 1,286 | 77 |
| | May | 1,685 | 196 | -336 | 267 | 40 | 1,238 | 87 |
| | June | 1,649 | 253 | -490 | 228 | 25 | 1,158 | 102 |
| | July | 1,684 | 303 | -450 | 199 | 50 | 1,287 | 116 |
| | August | 1,619 | 271 | -332 | 243 | 53 | 1,262 | 126 |
| | September | 1,631 | 282 | -142 | 288 | 27 | 1,456 | 131 |
| | October | 1,625 | 234 | 249 | 332 | 26 | 1,750 | 123 |
| | November | 1,724 | 310 | 254 | 417 | 53 | 1,817 | 115 |
| | December | 1,725 | 227 | 411 | 456 | 33 | 1,875 | 103 |
| | **Average** | **1,695** | **242** | **-80** | **302** | **42** | **1,512** | -- |
| 1987 | January | 1,751 | 183 | 500 | 419 | 43 | 1,971 | 87 |
| | February | 1,762 | 201 | 205 | 341 | 38 | 1,789 | 81 |
| | March | 1,761 | 132 | -10 | 282 | 52 | 1,550 | 82 |
| | April | 1,775 | 149 | -121 | 274 | 36 | 1,493 | 85 |
| | May | 1,732 | 142 | -283 | 269 | 34 | 1,288 | 94 |
| | June | 1,732 | 119 | -175 | 255 | 22 | 1,400 | 99 |
| | July | 1,764 | 190 | -145 | 244 | 30 | 1,534 | 104 |
| | August | 1,717 | 198 | -259 | 252 | 33 | 1,372 | 112 |
| | September | 1,736 | 288 | -81 | 266 | 56 | 1,622 | 114 |
| | October | 1,736 | 233 | 59 | 294 | 23 | 1,711 | 113 |
| | November | 1,763 | 233 | 129 | 356 | 35 | 1,735 | 109 |
| | December | 1,753 | 214 | 372 | 395 | 56 | 1,887 | 97 |
| | **Average** | **1,748** | **190** | **15** | **304** | **38** | **1,612** | -- |
| 1988 | January | 1,723 | 226 | 529 | 366 | 44 | 2,069 | 81 |
| | February | 1,757 | 245 | 364 | 336 | 47 | 1,982 | 70 |
| | March | 1,802 | 165 | 45 | 266 | 36 | 1,710 | 69 |
| | April | 1,796 | 205 | -362 | 256 | 43 | 1,339 | 80 |
| | May | 1,809 | 165 | -333 | 253 | 37 | 1,350 | 90 |
| | June | 1,804 | 144 | -333 | 234 | 38 | 1,343 | 100 |
| | July | 1,831 | 233 | -384 | 228 | 35 | 1,416 | 112 |
| | August | 1,848 | 241 | -281 | 241 | 50 | 1,517 | 121 |
| | September | 1,837 | 194 | -34 | 251 | 43 | 1,704 | 122 |
| | October | 1,869 | 216 | 55 | 296 | 56 | 1,787 | 120 |
| | November* | 1,831 | 258 | 161 | 425 | 71 | 1,753 | 115 |
| | **11-Mo. Average** | **1,810** | **208** | **-54** | **286** | **45** | **1,633** | -- |
| 1987 | **11-Mo. Average** | **1,748** | **188** | **-18** | **295** | **36** | **1,586** | -- |
| 1986 | **11-Mo. Average** | **1,692** | **243** | **-125** | **288** | **43** | **1,479** | -- |

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[1] Includes ethane, propane, normal butane, and isobutane. Beginning in January 1984, unfractionated stream is reported by individual product.

[2] A negative number indicates an increase in stocks and a positive number indicates a decrease.

[3] Stocks are totals as of end of period.

[4] In January 1975, 1981, 1983, and 1984, a new stock basis was established affecting stocks reported and stock withdrawal calculations.

See Explanatory Note 10.

* See Explanatory Note 9.5.

Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: See the last page of this section.

# Table S8. Other Petroleum Products[1] Supply and Disposition

| | | Supply | | | Disposition | | | |
|---|---|---|---|---|---|---|---|---|
| | | Total Production | Imports | Stock Withdrawal [2] | Refinery Inputs | Exports | Product Supplied | Ending Stocks [3] |
| | | Thousand Barrels per Day | | | | | | Million Barrels |
| 1973 | **Average** | **3,693** | **502** | **-9** | **750** | **166** | **3,270** | **208** |
| 1974 | **Average** | **3,558** | **432** | **-28** | **665** | **174** | **3,123** | **[4] 218** |
| 1975 | **Average** | **3,418** | **277** | **[4] 4** | **537** | **160** | **3,002** | **219** |
| 1976 | **Average** | **3,643** | **206** | **-5** | **524** | **175** | **3,145** | **220** |
| 1977 | **Average** | **3,912** | **205** | **-27** | **514** | **165** | **3,410** | **230** |
| 1978 | **Average** | **4,046** | **166** | **14** | **492** | **167** | **3,568** | **225** |
| 1979 | **Average** | **4,153** | **195** | **-37** | **352** | **209** | **3,749** | **238** |
| 1980 | **Average** | **3,956** | **210** | **-23** | **311** | **198** | **3,634** | **[4] 247** |
| 1981 | **Average** | **3,739** | **226** | **[4] 46** | **723** | **199** | **3,088** | **282** |
| 1982 | **Average** | **3,453** | **334** | **80** | **787** | **211** | **2,869** | **[4] 253** |
| 1983 | **Average** | **3,460** | **411** | **[4] 6** | **712** | **242** | **2,923** | **[4] 256** |
| 1984 | **Average** | **3,632** | **565** | **[4] 23** | **791** | **245** | **3,183** | **240** |
| 1985 | **Average** | **3,721** | **588** | **-17** | **886** | **240** | **3,166** | **246** |
| 1986 | January | 3,902 | 541 | [5] -172 | 967 | 311 | 2,993 | 252 |
| | February | 3,868 | 393 | -209 | 747 | 270 | 3,035 | [5] 258 |
| | March | 3,754 | 454 | [5] 21 | 854 | 208 | 3,167 | 257 |
| | April | 3,788 | 638 | -100 | 760 | 369 | 3,196 | 260 |
| | May | 4,055 | 659 | -114 | 810 | 298 | 3,492 | [5] 264 |
| | June | 4,209 | 687 | [5] -70 | 853 | 263 | 3,710 | 266 |
| | July | 4,145 | 589 | [5] 119 | 1,064 | 357 | 3,432 | 262 |
| | August | 4,223 | 572 | 335 | 1,061 | 301 | 3,768 | [5] 252 |
| | September | 4,225 | 571 | [5] 35 | 846 | 278 | 3,708 | [5] 251 |
| | October | 3,969 | 575 | [5] -112 | 666 | 375 | 3,391 | 254 |
| | November | 3,904 | 559 | [5] 36 | 940 | 342 | 3,217 | 253 |
| | December | 3,920 | 490 | [5] 90 | 1,069 | 325 | 3,105 | 250 |
| | **Average** | **3,997** | **561** | **-10** | **888** | **308** | **3,353** | **--** |
| 1987 | January | 3,852 | 469 | -121 | 659 | 219 | 3,323 | 254 |
| | February | 3,796 | 687 | -389 | 352 | 320 | 3,422 | 265 |
| | March | 3,766 | 663 | -128 | 757 | 281 | 3,262 | 269 |
| | April | 3,933 | 589 | 107 | 872 | 254 | 3,502 | 266 |
| | May | 4,049 | 529 | 178 | 913 | 320 | 3,523 | 260 |
| | June | 4,203 | 712 | 158 | 896 | 320 | 3,857 | 255 |
| | July | 4,363 | 550 | 91 | 835 | 256 | 3,913 | 253 |
| | August | 4,340 | 616 | -148 | 693 | 238 | 3,876 | 257 |
| | September | 4,350 | 611 | -24 | 903 | 353 | 3,681 | 258 |
| | October | 4,223 | 686 | 14 | 971 | 272 | 3,680 | 258 |
| | November | 4,010 | 583 | -20 | 975 | 305 | 3,294 | 258 |
| | December | 4,050 | 633 | 261 | 1,091 | 330 | 3,523 | 250 |
| | **Average** | **4,080** | **610** | **1** | **829** | **289** | **3,572** | **--** |
| 1988 | January | 3,988 | 639 | -143 | 785 | 354 | 3,345 | 254 |
| | February | 3,941 | 570 | -35 | 726 | 318 | 3,433 | 255 |
| | March | 4,175 | 603 | -269 | 656 | 328 | 3,525 | 264 |
| | April | 4,052 | 697 | -97 | 832 | 288 | 3,533 | 267 |
| | May | 4,097 | 752 | -341 | 471 | 274 | 3,763 | 277 |
| | June | 4,278 | 703 | 76 | 759 | 379 | 3,920 | 275 |
| | July | 4,333 | 652 | -20 | 824 | 329 | 3,812 | 276 |
| | August | 4,440 | 644 | 201 | 782 | 302 | 4,200 | 269 |
| | September | 4,259 | 582 | 129 | 841 | 323 | 3,807 | 266 |
| | October | 4,193 | 699 | 42 | 768 | 268 | 3,898 | 264 |
| | November* | 4,079 | 745 | -59 | 808 | 303 | 3,655 | 266 |
| | **11-Mo. Average** | **4,168** | **663** | **-48** | **750** | **315** | **3,719** | **--** |
| 1987 | **11-Mo. Average** | **4,083** | **608** | **-23** | **805** | **285** | **3,577** | **--** |
| 1986 | **11-Mo. Average** | **4,005** | **568** | **-19** | **871** | **307** | **3,376** | **--** |

[1] Includes pentanes plus, other hydrocarbons and alcohol, unfinished oils, gasoline blending components and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil, and liquefied petroleum gases.

[2] A negative number indicates an increase in stocks and a positive number indicates a decrease.

[3] Stocks are totals as of end of period.

[4] In January 1975, 1981, 1983, and 1984, a new stock basis was established affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10.

[5] Ending stocks and stock withdrawal for 1986 are slightly different from those published in the 1986 *Petroleum Supply Annual* (PSA)-- Volume 1. PSA statistics inadvertently omitted stocks of other hydrocarbons and alcohol.

* See Explanatory Note 9.6.

Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: See the last page of this section.

# Sources of Summary Statistics

1. 1973 through 1976: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys, Petroleum Statement, Annual* and *PAD Districts Supply/Demand, Annual.*

2. 1977 through 1980: U.S. Department of Energy, Energy Information Administration (EIA), *Energy Data Reports, Petroleum Statement, Annual* and *PAD Districts Supply/Demand, Annual*, and unleaded gasoline data from *Monthly Petroleum Statistics Report.*

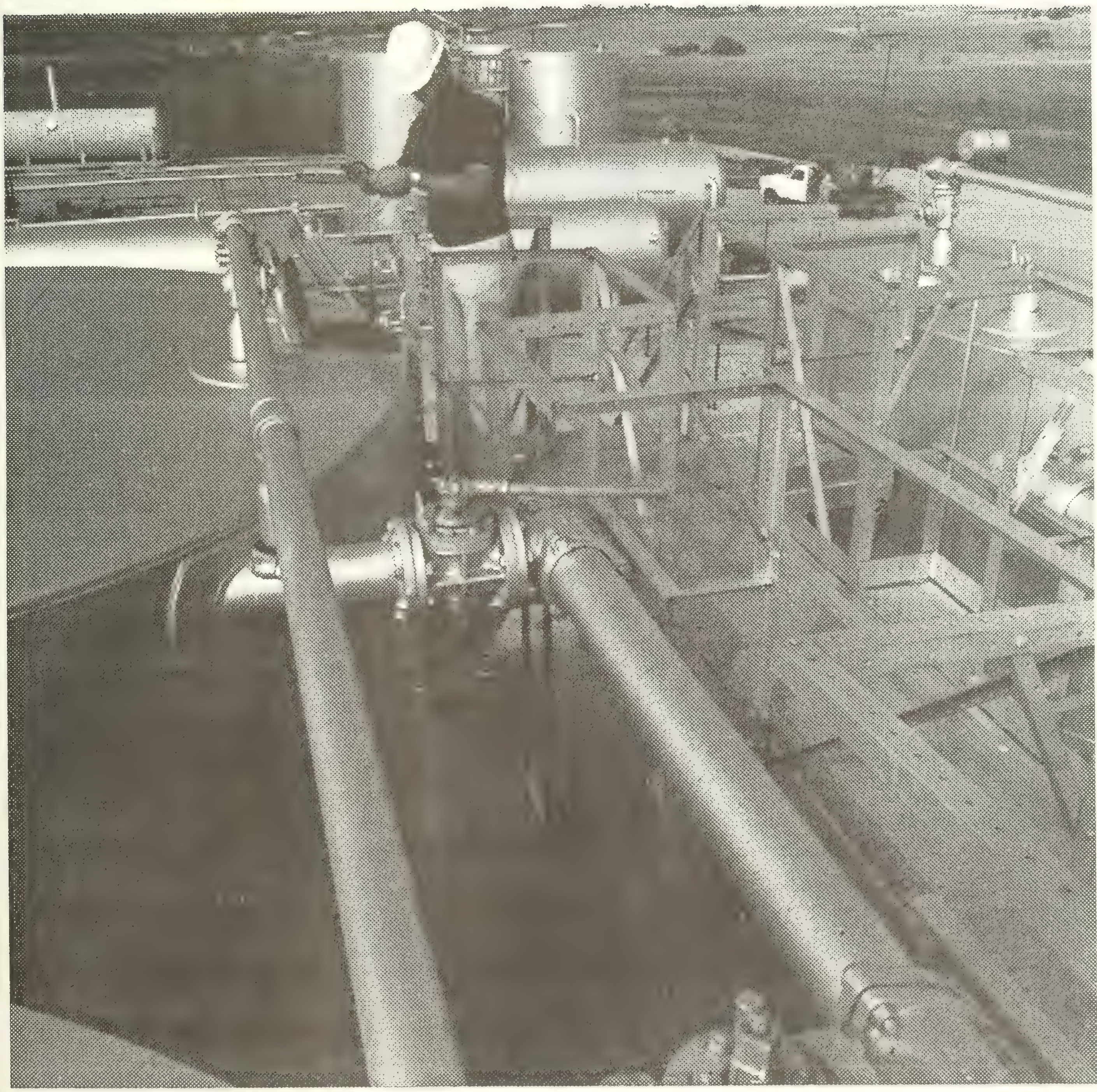
3. 1981 through 1987: EIA, *Petroleum Supply Annual.*

4. January 1988 through November 1988: Detailed Statistics in appropriate issues of the *Petroleum Supply Monthly.* (See Explanatory Notes 9.1 through 9.6.)

5. December 1988: Estimates based on EIA weekly data (except domestic crude oil production). (See Explanatory Note 1.1.)

6. January 1988 through December 1988: Domestic crude oil production estimate based on historical statistics from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. (See Explanatory Note 3.)

# Detailed Statistics



*At some locations, oil skimmers and knockout tanks (in background) are used to remove waste water from the crude oil. The crude oil is then put into storage tanks and gauged.*

## Table 1. U.S. Petroleum Balance, November 1988

| | Current Month | | Year to Date | |
|---|---|---|---|---|
| | Thousand Barrels | Thousand Barrels per Day | Thousand Barrels | Thousand Barrels per Day |
| Crude Oil (Including Lease Condensate) | | | | |
| Field Production | | | | |
| (1) Alaska | E 60,801 | E 2,027 | E 676,286 | E 2,019 |
| (2) Lower 48 States | E 178,752 | E 5,958 | E 2,051,548 | E 6,124 |
| (3) Total U.S. | E 239,553 | E 7,985 | E 2,727,834 | E 8,143 |
| Net Imports | | | | |
| (4) Imports (Gross Excluding SPR) | 147,829 | 4,928 | 1,666,687 | 4,975 |
| (5) SPR Imports | 2,668 | 89 | 17,918 | 53 |
| (6) Exports | 4,537 | 151 | 53,977 | 161 |
| (7) Imports (Net Including SPR) | 145,960 | 4,865 | 1,630,628 | 4,868 |
| Other Sources | | | | |
| (8) SPR Withdrawal (+) or Addition (-) | -2,672 | -89 | -18,025 | -54 |
| (9) Other Stock Withdrawal (+) or Addition (-) | 2,558 | 85 | 12,240 | 37 |
| (10) Product Supplied and Losses | -1,321 | -44 | -13,102 | -39 |
| (11) Unaccounted for[1] | 11,800 | 393 | 110,384 | 330 |
| (12) Total Other Sources | 10,365 | 346 | 91,497 | 273 |
| (13) Crude Input to Refineries | 395,878 | 13,196 | 4,449,959 | 13,283 |
| (13) = (3) + (7) + (12) | | | | |
| Natural Gas Plant Liquids (NGPL) | | | | |
| (14) Field Production | 49,998 | 1,667 | 542,605 | 1,620 |
| (15) Net Imports[2] | 530 | 18 | 3,163 | 9 |
| (16) Stock Withdrawal (+) or Addition (-)[2] | 1,383 | 46 | -821 | -2 |
| (17) Total NGPL Supply | 51,911 | 1,730 | 544,947 | 1,627 |
| Other Liquids | | | | |
| Unfinished Oils and Gasoline Blending Components, Total | | | | |
| (18) Stock Withdrawal (+) or Addition (-) | -3,513 | -117 | -19,372 | -58 |
| (19) Imports | 14,527 | 484 | 139,385 | 416 |
| (20) Other Hydrocarbons and Alcohol New Supply (Field Production) | 1,767 | 59 | 19,950 | 60 |
| (21) Refinery Processing Gain[1] | 19,201 | 640 | 220,241 | 657 |
| (22) Crude Oil Product Supplied | 1,319 | 44 | 13,053 | 39 |
| (23) Total Other Liquids | 33,301 | 1,110 | 373,257 | 1,114 |
| (23) = (18) through (22) | | | | |
| (24) Total Production of Products[3] | 481,090 | 16,036 | 5,368,163 | 16,024 |
| (24) = (13) + (17) + (23) | | | | |
| Net Imports of Refined Products[3] | | | | |
| (25) Imports (Gross) | 60,649 | 2,022 | 558,977 | 1,669 |
| (26) Exports | 16,966 | 566 | 213,783 | 638 |
| (27) Imports (Net) | 43,683 | 1,456 | 345,195 | 1,030 |
| (28) Total New Supply of Products | 524,773 | 17,492 | 5,713,358 | 17,055 |
| (28) = (24) + (27) | | | | |
| (29) Refined Products Stock Withdrawal (+) or Addition (-)[3] | -1,987 | -66 | -544 | -2 |
| (30) Total Petroleum Products Supplied for Domestic Use | 522,786 | 17,426 | 5,712,814 | 17,053 |
| (30) = (28) + (29) | | | | |
| (31) Finished Motor Gasoline | 221,061 | 7,369 | 2,449,356 | 7,312 |
| (32) Distillate Fuel Oil | 94,577 | 3,153 | 1,025,625 | 3,062 |
| (33) Residual Fuel Oil | 43,578 | 1,453 | 431,910 | 1,289 |
| (34) Liquefied Petroleum Gases | 52,602 | 1,753 | 547,027 | 1,633 |
| (35) Other[4] | 109,648 | 3,655 | 1,245,843 | 3,719 |
| (36) Crude Oil | 1,319 | 44 | 13,053 | 39 |
| (37) Total Product Supplied | 522,786 | 17,426 | 5,712,814 | 17,053 |
| (37) = (31) through (36) | | | | |
| Ending Stocks, All Oils | | | | |
| (38) Crude Oil and Lease Condensate (Excluding SPR) | 337,049 | -- | 337,049 | -- |
| (39) Strategic Petroleum Reserve (SPR) | 558,673 | -- | 558,673 | - |
| (40) Unfinished Oils | 112,556 | -- | 112,556 | -- |
| (41) Gasoline Blending Components[5] | 38,085 | -- | 38,085 | -- |
| (42) Pentanes Plus | 7,852 | -- | 7,852 | -- |
| (43) Finished Refined Products[3] | 580,158 | -- | 580,158 | -- |
| (44) Total Stocks | 1,634,373 | -- | 1,634,373 | -- |

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[1] A balancing item.

[2] Includes products in the pentanes plus category only

[3] For products included see Explanatory Note 9.7.

[4] Includes pentanes plus, other liquids, and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil and liquefied petroleum gases.

[5] Includes other hydrocarbons and alcohol.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1, 2 and 9.7.

## Table 2. Supply and Disposition of Crude Oil and Petroleum Products, November 1988
(Thousand Barrels)

| Commodity | Supply | | | | | Disposition | | | | Ending Stocks |
|---|---|---|---|---|---|---|---|---|---|---|
| | Field Production | Refinery Production | Imports | Stock Withdrawal (+) or Addition (-) | Unaccounted For Crude Oil[1] | Crude Losses | Refinery Inputs | Exports | Products Supplied | |
| **Crude Oil (including lease condensate)** | **E 239,553** | **0** | **150,497** | **-114** | **11,800** | **2** | **395,878** | **4,537** | **1,319** | **895,722** |
| **Natural Gas Liquids and LRGs** | **49,885** | **14,034** | **8,379** | **6,215** | **0** | **0** | **17,828** | **2,255** | **58,430** | **122,943** |
| Pentanes Plus | 9,000 | 0 | 644 | 1,383 | 0 | 0 | 5,085 | 114 | 5,828 | 7,852 |
| Liquefied Petroleum Gases | 40,885 | 14,034 | 7,735 | 4,832 | 0 | 0 | 12,743 | 2,141 | 52,602 | 115,091 |
| Ethane | 16,179 | 361 | 254 | -754 | 0 | 0 | 84 | 228 | 15,728 | 18,913 |
| Propane | 15,455 | 10,786 | 3,360 | 1,715 | 0 | 0 | 281 | 1,383 | 29,651 | 59,173 |
| Normal Butane | 4,993 | 2,618 | 2,679 | 3,438 | 0 | 0 | 7,729 | 416 | 5,583 | 26,337 |
| Isobutane | 4,258 | 269 | 1,442 | 433 | 0 | 0 | 4,649 | 114 | 1,640 | 10,668 |
| **Other Liquids** | **1,767** | **0** | **14,527** | **-3,513** | **0** | **0** | **19,162** | **0** | **-6,381** | **150,641** |
| Other Hydrocarbons and Alcohol | 1,767 | 0 | 0 | 114 | 0 | 0 | 1,881 | 0 | 0 | 480 |
| Unfinished Oils | 0 | 0 | 12,640 | -3,605 | 0 | 0 | 14,813 | 0 | -5,778 | 112,556 |
| Motor Gasoline Blending Components | 0 | 0 | 1,887 | -52 | 0 | 0 | 2,426 | 0 | -591 | 37,362 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | 30 | 0 | 0 | 42 | 0 | -12 | 243 |
| **Finished Petroleum Products** | **113** | **438,035** | **52,914** | **-6,819** | **0** | **0** | **0** | **14,825** | **469,418** | **465,067** |
| Finished Motor Gasoline | 10 | 211,687 | 13,540 | -3,729 | 0 | 0 | 0 | 447 | 221,061 | 183,732 |
| Finished Leaded Motor Gasoline | 9 | 35,918 | 400 | 455 | 0 | 0 | 0 | 176 | 36,606 | 38,118 |
| Finished Unleaded Motor Gasoline | 1 | 175,769 | 13,140 | -4,184 | 0 | 0 | 0 | 270 | 184,456 | 145,614 |
| Finished Aviation Gasoline | 0 | 595 | 6 | 23 | 0 | 0 | 0 | 0 | 624 | 1,924 |
| Naphtha-Type Jet Fuel | 0 | 6,575 | 80 | -120 | 0 | 0 | 0 | 3 | 6,532 | 6,436 |
| Kerosene-Type Jet Fuel | 0 | 33,541 | 2,283 | 1,014 | 0 | 0 | 0 | 271 | 36,567 | 40,018 |
| Kerosene | 0 | 2,972 | 529 | -109 | 0 | 0 | 0 | 59 | 3,333 | 8,115 |
| Distillate Fuel Oil | 36 | 87,109 | 9,240 | -775 | 0 | 0 | 0 | 1,033 | 94,577 | 128,724 |
| Residual Fuel Oil | 0 | 27,699 | 22,942 | -2,684 | 0 | 0 | 0 | 4,379 | 43,578 | 45,089 |
| Naphtha < 400 Deg. for Petro. Feed. Use | 0 | 3,076 | 2,961 | 108 | 0 | 0 | 0 | 280 | 5,865 | 2,120 |
| Other Oils > 400 Deg. for Petro. Feed. Use | 0 | 6,986 | 0 | -583 | 0 | 0 | 0 | 649 | 5,754 | 1,949 |
| Special Naphthas | 0 | 2,489 | 183 | -31 | 0 | 0 | 0 | 338 | 2,303 | 3,327 |
| Lubricants | 0 | 4,962 | 253 | 249 | 0 | 0 | 0 | 635 | 4,829 | 12,508 |
| Waxes | 0 | 503 | 54 | -43 | 0 | 0 | 0 | 43 | 471 | 862 |
| Petroleum Coke | 0 | 16,692 | 45 | -242 | 0 | 0 | 0 | 6,631 | 9,864 | 8,301 |
| Asphalt and Road Oil | 0 | 11,037 | 767 | -104 | 0 | 0 | 0 | 5 | 11,695 | 18,747 |
| Still Gas | 0 | 19,850 | 0 | 0 | 0 | 0 | 0 | 0 | 19,850 | 0 |
| Miscellaneous Products | 67 | 2,262 | 31 | 207 | 0 | 0 | 0 | 52 | 2,515 | 3,215 |
| **Total** | **291,318** | **452,069** | **226,317** | **-4,231** | **11,800** | **2** | **432,868** | **21,617** | **522,786** | **1,634,373** |

[1] Unaccounted for crude oil is a balancing item.

(s) = Less than 500 barrels.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 3. Year-to-Date Supply and Disposition of Crude Oil and Petroleum Products, January - November 1988

(Thousand Barrels)

| Commodity | Supply | | | | | Disposition | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Field Production | Refinery Production | Imports | Stock Withdrawal (+) or Addition (-) | Unaccounted For Crude Oil[1] | Crude Losses | Refinery Inputs | Exports | Products Supplied | Ending Stocks |
| **Crude Oil (including lease condensate)** | E **2,727,834** | **0** | **1,684,605** | **-5,785** | **110,384** | **49** | **4,449,959** | **53,977** | **13,053** | **895,722** |
| **Natural Gas Liquids and LRGs** | **541,323** | **166,599** | **73,632** | **-18,760** | **0** | **0** | **149,364** | **15,942** | **597,488** | **122,943** |
| Pentanes Plus | 101,608 | 0 | 3,883 | -821 | 0 | 0 | 53,489 | 720 | 50,461 | 7,852 |
| Liquefied Petroleum Gases | 439,715 | 166,599 | 69,749 | -17,939 | 0 | 0 | 95,875 | 15,222 | 547,027 | 115,091 |
| Ethane | 166,233 | 3,497 | 647 | 3,346 | 0 | 0 | 715 | 1,451 | 171,557 | 18,913 |
| Propane | 169,156 | 118,471 | 35,436 | -11,324 | 0 | 0 | 2,778 | 9,309 | 299,652 | 59,173 |
| Normal Butane | 55,923 | 40,122 | 21,428 | -9,789 | 0 | 0 | 45,210 | 3,742 | 58,732 | 26,337 |
| Isobutane | 48,403 | 4,509 | 12,238 | -172 | 0 | 0 | 47,172 | 720 | 17,086 | 10,668 |
| **Other Liquids** | **19,950** | **0** | **139,385** | **-19,372** | **0** | **0** | **197,605** | **0** | **-57,642** | **150,641** |
| Other Hydrocarbons and Alcohol | 19,950 | 0 | 0 | -48 | 0 | 0 | 19,902 | 0 | 0 | 480 |
| Unfinished Oils | 0 | 0 | 120,165 | -19,371 | 0 | 0 | 147,141 | 0 | -46,347 | 112,556 |
| Motor Gasoline Blending Components | 0 | 0 | 19,220 | 34 | 0 | 0 | 30,337 | 0 | -11,083 | 37,362 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | 13 | 0 | 0 | 225 | 0 | -212 | 243 |
| **Finished Petroleum Products** | **1,282** | **4,850,570** | **489,229** | **17,395** | **0** | **0** | **0** | **198,561** | **5,159,914** | **465,067** |
| Finished Motor Gasoline | 108 | 2,318,645 | 132,118 | 5,162 | 0 | 0 | 0 | 6,677 | 2,449,356 | 183,732 |
| Finished Leaded Motor Gasoline | 97 | 439,280 | 3,929 | 15,077 | 0 | 0 | 0 | 2,261 | 456,122 | 38,118 |
| Finished Unleaded Motor Gasoline | 11 | 1,879,365 | 128,189 | -9,915 | 0 | 0 | 0 | 4,416 | 1,993,234 | 145,614 |
| Finished Aviation Gasoline | 0 | 8,441 | 144 | 407 | 0 | 0 | 0 | 0 | 8,992 | 1,924 |
| Naphtha-Type Jet Fuel | 0 | 68,590 | 967 | 1,520 | 0 | 0 | 0 | 416 | 70,661 | 6,436 |
| Kerosene-Type Jet Fuel | 0 | 386,950 | 28,767 | 1,953 | 0 | 0 | 0 | 7,233 | 410,436 | 40,018 |
| Kerosene | 0 | 25,649 | 4,595 | 332 | 0 | 0 | 0 | 376 | 30,200 | 8,115 |
| Distillate Fuel Oil | 465 | 951,313 | 90,496 | 5,758 | 0 | 0 | 0 | 22,407 | 1,025,625 | 128,724 |
| Residual Fuel Oil | 0 | 306,544 | 187,840 | 2,248 | 0 | 0 | 0 | 64,722 | 431,910 | 45,089 |
| Naphtha < 400 Deg. for Petro. Feed. Use | 0 | 39,397 | 23,659 | 216 | 0 | 0 | 0 | 1,798 | 61,474 | 2,120 |
| Other Oils > 400 Deg. for Petro. Feed. Use | 0 | 75,297 | 1,549 | -348 | 0 | 0 | 0 | 5,651 | 70,847 | 1,949 |
| Special Naphthas | 0 | 20,747 | 3,781 | 326 | 0 | 0 | 0 | 2,198 | 22,656 | 3,327 |
| Lubricants | 0 | 57,478 | 3,341 | 809 | 0 | 0 | 0 | 8,124 | 53,504 | 12,508 |
| Waxes | 0 | 5,696 | 537 | -79 | 0 | 0 | 0 | 555 | 5,599 | 862 |
| Petroleum Coke | 0 | 181,477 | 394 | -1,541 | 0 | 0 | 0 | 77,549 | 102,781 | 8,301 |
| Asphalt and Road Oil | 0 | 153,552 | 10,485 | 52 | 0 | 0 | 0 | 257 | 163,832 | 18,747 |
| Still Gas | 0 | 226,815 | 0 | 0 | 0 | 0 | 0 | 0 | 226,815 | 0 |
| Miscellaneous Products | 709 | 23,979 | 556 | 580 | 0 | 0 | 0 | 598 | 25,226 | 3,215 |
| **Total** | **3,290,389** | **5,017,169** | **2,386,850** | **-26,522** | **110,384** | **49** | **4,796,928** | **268,480** | **5,712,814** | **1,634,373** |

[1] Unaccounted for crude oil is a balancing item

(s) Less than 500 barrels

E Estimated

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2

## Table 4. Daily Average Supply and Disposition of Crude Oil and Petroleum Products, November 1988
(Thousand Barrels per Day)

| Commodity | Supply | | | | | Disposition | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Field Production | Refinery Production | Imports | Stock Withdrawal (+) or Addition (-) | Unaccounted For Crude Oil[1] | Crude Losses | Refinery Inputs | Exports | Products Supplied |
| **Crude Oil (including lease condensate)** | E 7,985 | **0** | **5,017** | **-4** | **393** | (s) | **13,196** | **151** | **44** |
| **Natural Gas Liquids and LRGs** | **1,663** | **468** | **279** | **207** | **0** | **0** | **594** | **75** | **1,948** |
| Pentanes Plus | 300 | 0 | 21 | 46 | 0 | 0 | 170 | 4 | 194 |
| Liquefied Petroleum Gases | 1,363 | 468 | 258 | 161 | 0 | 0 | 425 | 71 | 1,753 |
| Ethane | 539 | 12 | 8 | -25 | 0 | 0 | 3 | 8 | 524 |
| Propane | 515 | 360 | 112 | 57 | 0 | 0 | 9 | 46 | 988 |
| Normal Butane | 166 | 87 | 89 | 115 | 0 | 0 | 258 | 14 | 186 |
| Isobutane | 142 | 9 | 48 | 14 | 0 | 0 | 155 | 4 | 55 |
| **Other Liquids** | **59** | **0** | **484** | **-117** | **0** | **0** | **639** | **0** | **-213** |
| Other Hydrocarbons and Alcohol | 59 | 0 | 0 | 4 | 0 | 0 | 63 | 0 | 0 |
| Unfinished Oils | 0 | 0 | 421 | -120 | 0 | 0 | 494 | 0 | -193 |
| Motor Gasoline Blending Components | 0 | 0 | 63 | -2 | 0 | 0 | 81 | 0 | -20 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | (s) |
| **Finished Petroleum Products** | **4** | **14,601** | **1,764** | **-227** | **0** | **0** | **0** | **494** | **15,647** |
| Finished Motor Gasoline | (s) | 7,056 | 451 | -124 | 0 | 0 | 0 | 15 | 7,369 |
| Finished Leaded Motor Gasoline | (s) | 1,197 | 13 | 15 | 0 | 0 | 0 | 6 | 1,220 |
| Finished Unleaded Motor Gasoline | (s) | 5,859 | 438 | -139 | 0 | 0 | 0 | 9 | 6,149 |
| Finished Aviation Gasoline | 0 | 20 | (s) | 1 | 0 | 0 | 0 | 0 | 21 |
| Naphtha-Type Jet Fuel | 0 | 219 | 3 | -4 | 0 | 0 | 0 | (s) | 218 |
| Kerosene-Type Jet Fuel | 0 | 1,118 | 76 | 34 | 0 | 0 | 0 | 9 | 1,219 |
| Kerosene | 0 | 99 | 18 | -4 | 0 | 0 | 0 | 2 | 111 |
| Distillate Fuel Oil | 1 | 2,904 | 308 | -26 | 0 | 0 | 0 | 34 | 3,153 |
| Residual Fuel Oil | 0 | 923 | 765 | -89 | 0 | 0 | 0 | 146 | 1,453 |
| Naphtha < 400 Deg. for Petro. Feed. Use | 0 | 103 | 99 | 4 | 0 | 0 | 0 | 9 | 195 |
| Other Oils > 400 Deg. for Petro. Feed. Use | 0 | 233 | 0 | -19 | 0 | 0 | 0 | 22 | 192 |
| Special Naphthas | 0 | 83 | 6 | -1 | 0 | 0 | 0 | 11 | 77 |
| Lubricants | 0 | 165 | 8 | 8 | 0 | 0 | 0 | 21 | 161 |
| Waxes | 0 | 17 | 2 | -1 | 0 | 0 | 0 | 1 | 16 |
| Petroleum Coke | 0 | 556 | 2 | -8 | 0 | 0 | 0 | 221 | 329 |
| Asphalt and Road Oil | 0 | 368 | 26 | -3 | 0 | 0 | 0 | (s) | 390 |
| Still Gas | 0 | 662 | 0 | 0 | 0 | 0 | 0 | 0 | 662 |
| Miscellaneous Products | 2 | 75 | 1 | 7 | 0 | 0 | 0 | 2 | 84 |
| **Total** | **9,711** | **15,069** | **7,544** | **-141** | **393** | (s) | **14,429** | **721** | **17,426** |

[1] Unaccounted for crude oil is a balancing item.

(s) = Less than 500 barrels per day.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 5. Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products, January - November 1988

(Thousand Barrels per Day)

| Commodity | Supply | | | | | | Disposition | | |
|---|---|---|---|---|---|---|---|---|---|
| | Field Production | Refinery Production | Imports | Stock Withdrawal (+) or Addition (-) | Unaccounted For Crude Oil[1] | Crude Losses | Refinery Inputs | Exports | Products Supplied |
| **Crude Oil (including lease condensate)** | E 8,143 | 0 | 5,029 | -17 | 330 | (s) | 13,283 | 161 | 39 |
| **Natural Gas Liquids and LRGs** | **1,616** | **497** | **220** | **-56** | **0** | **0** | **446** | **48** | **1,784** |
| Pentanes Plus | 303 | 0 | 12 | -2 | 0 | 0 | 160 | 2 | 151 |
| Liquefied Petroleum Gases | 1,313 | 497 | 208 | -54 | 0 | 0 | 286 | 45 | 1,633 |
| Ethane | 496 | 10 | 2 | 10 | 0 | 0 | 2 | 4 | 512 |
| Propane | 505 | 354 | 106 | -34 | 0 | 0 | 8 | 28 | 894 |
| Normal Butane | 167 | 120 | 64 | -29 | 0 | 0 | 135 | 11 | 175 |
| Isobutane | 144 | 13 | 37 | -1 | 0 | 0 | 141 | 2 | 51 |
| **Other Liquids** | **60** | **0** | **416** | **-58** | **0** | **0** | **590** | **0** | **-172** |
| Other Hydrocarbons and Alcohol | 60 | 0 | 0 | (s) | 0 | 0 | 59 | 0 | 0 |
| Unfinished Oils | 0 | 0 | 359 | -58 | 0 | 0 | 439 | 0 | -138 |
| Motor Gasoline Blending Components | 0 | 0 | 57 | (s) | 0 | 0 | 91 | 0 | -33 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | (s) | 0 | 0 | 1 | 0 | -1 |
| **Finished Petroleum Products** | **4** | **14,479** | **1,460** | **52** | **0** | **0** | **0** | **593** | **15,403** |
| Finished Motor Gasoline | (s) | 6,921 | 394 | 15 | 0 | 0 | 0 | 20 | 7,312 |
| Finished Leaded Motor Gasoline | (s) | 1,311 | 12 | 45 | 0 | 0 | 0 | 7 | 1,362 |
| Finished Unleaded Motor Gasoline | (s) | 5,610 | 383 | -30 | 0 | 0 | 0 | 13 | 5,950 |
| Finished Aviation Gasoline | 0 | 25 | (s) | 1 | 0 | 0 | 0 | 0 | 27 |
| Naphtha-Type Jet Fuel | 0 | 205 | 3 | 5 | 0 | 0 | 0 | 1 | 211 |
| Kerosene-Type Jet Fuel | 0 | 1,155 | 86 | 6 | 0 | 0 | 0 | 22 | 1,225 |
| Kerosene | 0 | 77 | 14 | 1 | 0 | 0 | 0 | 1 | 90 |
| Distillate Fuel Oil | 1 | 2,840 | 270 | 17 | 0 | 0 | 0 | 67 | 3,062 |
| Residual Fuel Oil | 0 | 915 | 561 | 7 | 0 | 0 | 0 | 193 | 1,289 |
| Naphtha < 400 Deg. for Petro. Feed. Use | 0 | 118 | 71 | 1 | 0 | 0 | 0 | 5 | 184 |
| Other Oils > 400 Deg. for Petro. Feed. Use | 0 | 225 | 5 | -1 | 0 | 0 | 0 | 17 | 211 |
| Special Naphthas | 0 | 62 | 11 | 1 | 0 | 0 | 0 | 7 | 68 |
| Lubricants | 0 | 172 | 10 | 2 | 0 | 0 | 0 | 24 | 160 |
| Waxes | 0 | 17 | 2 | (s) | 0 | 0 | 0 | 2 | 17 |
| Petroleum Coke | 0 | 542 | 1 | -5 | 0 | 0 | 0 | 231 | 307 |
| Asphalt and Road Oil | 0 | 458 | 31 | (s) | 0 | 0 | 0 | 1 | 489 |
| Still Gas | 0 | 677 | 0 | 0 | 0 | 0 | 0 | 0 | 677 |
| Miscellaneous Products | 2 | 72 | 2 | 2 | 0 | 0 | 0 | 2 | 75 |
| **Total** | **9,822** | **14,977** | **7,125** | **-79** | **330** | (s) | **14,319** | **801** | **17,053** |

[1] Unaccounted for crude oil is a balancing item.

(s) Less than 500 barrels per day

E Estimated.

Note. Total may not equal sum of components due to independent rounding

Sources and estimation procedures: See Explanatory Notes 1 and 2

## Table 6. PAD District I--Supply and Disposition of Crude Oil and Petroleum Products, November 1988
(Thousand Barrels)

| Commodity | Supply | | | | | | Disposition | | | | Ending Stocks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Field Production | Refinery Production | Imports by PADD of Entry | Stock Withdrawal (+) or Addition (-) | Unaccounted For Crude Oil[1] | Net Receipts | Crude Losses | Refinery Inputs | Exports | Products Supplied | |
| **Crude Oil (including lease condensate)** | E **1,005** | **0** | **28,248** | **2,033** | **4,281** | **1,433** | **0** | **36,999** | **1** | **0** | **14,768** |
| **Natural Gas Liquids and LRGs** | **847** | **1,663** | **2,067** | **-73** | **0** | **3,192** | **0** | **329** | **100** | **7,266** | **5,660** |
| Liquefied Petroleum Gases | 742 | 1,663 | 1,573 | -54 | 0 | 3,192 | 0 | 314 | 100 | 6,701 | 5,588 |
| Pentanes Plus | 105 | 0 | 494 | -19 | 0 | 0 | 0 | 15 | 0 | 565 | 72 |
| **Other Liquids** | **12** | **0** | **5,012** | **-936** | **0** | **426** | **0** | **6,435** | **0** | **-1,921** | **17,997** |
| Other Hydrocarbons and Alcohol | 12 | 0 | 0 | -12 | 0 | 0 | 0 | 0 | 0 | 0 | 28 |
| Unfinished Oils | 0 | 0 | 3,729 | -952 | 0 | 220 | 0 | 6,056 | 0 | -3,059 | 13,435 |
| Motor Gasoline Blending Components | 0 | 0 | 1,283 | 28 | 0 | 206 | 0 | 379 | 0 | 1,138 | 4,534 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Finished Petroleum Products** | **0** | **44,383** | **46,988** | **-2,485** | **0** | **69,813** | **0** | **0** | **579** | **158,119** | **156,007** |
| Finished Motor Gasoline | 0 | 19,855 | 13,011 | -2,145 | 0 | 39,920 | 0 | 0 | 11 | 70,630 | 56,118 |
| Finished Leaded Motor Gasoline | 0 | 1,466 | 373 | 810 | 0 | 4,266 | 0 | 0 | 1 | 6,914 | 7,623 |
| Finished Unleaded Motor Gasoline | 0 | 18,389 | 12,638 | -2,955 | 0 | 35,654 | 0 | 0 | 10 | 63,716 | 48,495 |
| Finished Aviation Gasoline | 0 | 0 | 0 | -3 | 0 | 129 | 0 | 0 | 0 | 126 | 394 |
| Naphtha-Type Jet Fuel | 0 | 869 | 0 | 14 | 0 | 207 | 0 | 0 | (s) | 1,090 | 1,063 |
| Kerosene-Type Jet Fuel | 0 | 1,568 | 1,722 | -133 | 0 | 11,736 | 0 | 0 | (s) | 14,893 | 10,759 |
| Kerosene | 0 | 281 | 260 | -685 | 0 | 549 | 0 | 0 | 2 | 403 | 3,856 |
| Distillate Fuel Oil | 0 | 9,952 | 8,869 | 2,029 | 0 | 15,488 | 0 | 0 | 15 | 36,323 | 54,508 |
| Residual Fuel Oil | 0 | 3,815 | 21,909 | -1,043 | 0 | 103 | 0 | 0 | 4 | 24,780 | 18,651 |
| Petrochemical Feedstocks[2] | 0 | 223 | 197 | 4 | 0 | 86 | 0 | 0 | 80 | 430 | 350 |
| Special Naphthas | 0 | 421 | 4 | -74 | 0 | 305 | 0 | 0 | 123 | 533 | 1,060 |
| Lubricants | 0 | 757 | 205 | 105 | 0 | 909 | 0 | 0 | 276 | 1,700 | 2,626 |
| Waxes | 0 | 77 | 24 | 5 | 0 | 0 | 0 | 0 | 3 | 103 | 74 |
| Petroleum Coke | 0 | 1,444 | 0 | -172 | 0 | 0 | 0 | 0 | 45 | 1,227 | 844 |
| Asphalt and Road Oil | 0 | 2,940 | 760 | -426 | 0 | 358 | 0 | 0 | (s) | 3,632 | 4,960 |
| Still Gas | 0 | 1,760 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,760 | 0 |
| Miscellaneous Products | 0 | 421 | 27 | 39 | 0 | 23 | 0 | 0 | 20 | 490 | 744 |
| **Total** | **1,864** | **46,046** | **82,314** | **-1,461** | **4,281** | **74,864** | **0** | **43,763** | **680** | **163,465** | **194,432** |

[1] Unaccounted for crude oil is a balancing item.
[2] Includes naphtha less than 400 degrees F endpoint and other oils equal to or greater than 400 degrees F endpoint.
(s) = Less than 500 barrels.
E = Estimated.
Note: Total may not equal sum of components due to independent rounding.
Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 7. PAD District II--Supply and Disposition of Crude Oil and Petroleum Products, November 1988
(Thousand Barrels)

| Commodity | Supply | | | | | | Disposition | | | | Ending Stocks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Field Production | Refinery Production | Imports by PADD of Entry | Stock Withdrawal (+) or Addition (-) | Unaccounted For Crude Oil[1] | Net Receipts | Crude Losses | Refinery Inputs | Exports | Products Supplied | |
| **Crude Oil (including lease condensate)** | E 23,793 | 0 | 14,088 | -3,118 | 1,484 | 50,639 | 0 | 86,508 | 378 | 0 | 72,116 |
| **Natural Gas Liquids and LRGs** | 9,430 | 2,286 | 3,819 | 624 | 0 | 3,055 | 0 | 5,573 | 856 | 12,785 | 37,515 |
| Liquefied Petroleum Gases | 8,008 | 2,286 | 3,787 | 112 | 0 | 2,393 | 0 | 3,989 | 742 | 11,855 | 34,975 |
| Pentanes Plus | 1,422 | 0 | 32 | 512 | 0 | 662 | 0 | 1,584 | 114 | 930 | 2,540 |
| **Other Liquids** | 401 | 0 | 20 | -363 | 0 | 242 | 0 | 2,615 | 0 | -2,315 | 24,644 |
| Other Hydrocarbons and Alcohol | 401 | 0 | 0 | -31 | 0 | 0 | 0 | 370 | 0 | 0 | 188 |
| Unfinished Oils | 0 | 0 | 0 | -813 | 0 | 277 | 0 | 332 | 0 | -868 | 17,456 |
| Motor Gasoline Blending Components | 0 | 0 | 20 | 493 | 0 | -35 | 0 | 1,925 | 0 | -1,447 | 6,881 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | -12 | 0 | 0 | 0 | -12 | 0 | 0 | 119 |
| **Finished Petroleum Products** | 4 | 96,345 | 860 | 708 | 0 | 23,054 | 0 | 0 | 585 | 120,386 | 106,493 |
| Finished Motor Gasoline | 0 | 53,377 | 176 | -438 | 0 | 12,891 | 0 | 0 | 3 | 66,003 | 51,487 |
| Finished Leaded Motor Gasoline | 0 | 8,603 | 0 | -226 | 0 | 1,832 | 0 | 0 | (s) | 10,209 | 12,593 |
| Finished Unleaded Motor Gasoline | 0 | 44,774 | 176 | -212 | 0 | 11,059 | 0 | 0 | 3 | 55,794 | 38,894 |
| Finished Aviation Gasoline | 0 | 116 | 0 | -18 | 0 | 101 | 0 | 0 | 0 | 199 | 481 |
| Naphtha-Type Jet Fuel | 0 | 697 | 77 | 55 | 0 | -61 | 0 | 0 | (s) | 768 | 830 |
| Kerosene-Type Jet Fuel | 0 | 4,544 | 0 | 255 | 0 | 3,124 | 0 | 0 | 1 | 7,922 | 7,896 |
| Kerosene | 0 | 709 | 0 | 211 | 0 | -138 | 0 | 0 | 56 | 726 | 1,978 |
| Distillate Fuel Oil | 0 | 20,555 | 80 | -591 | 0 | 6,820 | 0 | 0 | 2 | 26,962 | 29,228 |
| Residual Fuel Oil | 0 | 2,496 | 288 | 186 | 0 | 133 | 0 | 0 | 0 | 2,837 | 3,388 |
| Petrochemical Feedstocks[2] | 0 | 1,425 | 23 | 42 | 0 | 141 | 0 | 0 | 41 | 1,590 | 392 |
| Special Naphthas | 0 | 535 | 68 | 1 | 0 | 132 | 0 | 0 | 5 | 731 | 642 |
| Lubricants | 0 | 788 | 18 | -23 | 0 | 197 | 0 | 0 | 28 | 952 | 2,026 |
| Waxes | 0 | 52 | 23 | -4 | 0 | 0 | 0 | 0 | 2 | 69 | 127 |
| Petroleum Coke | 0 | 3,485 | 0 | -45 | 0 | 0 | 0 | 0 | 446 | 2,994 | 1,409 |
| Asphalt and Road Oil | 0 | 2,956 | 3 | 1,096 | 0 | -20 | 0 | 0 | 0 | 4,035 | 6,218 |
| Still Gas | 0 | 4,220 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,220 | 0 |
| Miscellaneous Products | 4 | 390 | 4 | -19 | 0 | 0 | 0 | 0 | 1 | 378 | 391 |
| Total | 33,628 | 98,631 | 18,787 | -2,149 | 1,484 | 76,990 | 0 | 94,696 | 1,819 | 130,856 | 240,768 |

[1] Unaccounted for crude oil is a balancing item

[2] Includes naphtha less than 400 degrees F endpoint and other oils equal to or greater than 400 degrees F endpoint

(s) Less than 500 barrels

E = Estimated

Note Total may not equal sum of components due to independent rounding

Sources and estimation procedures See Explanatory Notes 1 and 2

## Table 8. PAD District III--Supply and Disposition of Crude Oil and Petroleum Products, November 1988
(Thousand Barrels)

| Commodity | Supply | | | | | | Disposition | | | | Ending Stocks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Field Production | Refinery Production | Imports by PADD of Entry | Stock Withdrawal (+) or Addition (-) | Unaccounted For Crude Oil[1] | Net Receipts | Crude Losses | Refinery Inputs | Exports | Products Supplied | |
| **Crude Oil (including lease condensate)** | E **106,659** | **0** | **98,073** | **-1,306** | **6,496** | **-29,177** | **0** | **180,745** | **0** | **0** | **715,578** |
| **Natural Gas Liquids and LRGs** | **33,076** | **8,495** | **1,427** | **4,895** | **0** | **-4,144** | **0** | **10,061** | **961** | **32,727** | **74,716** |
| Liquefied Petroleum Gases | 27,700 | 8,495 | 1,339 | 4,064 | 0 | -3,634 | 0 | 6,864 | 961 | 30,139 | 69,692 |
| Pentanes Plus | 5,376 | 0 | 88 | 831 | 0 | -510 | 0 | 3,197 | 0 | 2,588 | 5,024 |
| **Other Liquids** | **1,146** | **0** | **9,495** | **-2,700** | **0** | **-822** | **0** | **9,606** | **0** | **-2,487** | **69,383** |
| Other Hydrocarbons and Alcohol | 1,146 | 0 | 0 | -47 | 0 | 0 | 0 | 1,099 | 0 | 0 | 223 |
| Unfinished Oils | 0 | 0 | 8,911 | -2,784 | 0 | -651 | 0 | 8,006 | 0 | -2,530 | 53,129 |
| Motor Gasoline Blending Components | 0 | 0 | 584 | 94 | 0 | -171 | 0 | 464 | 0 | 43 | 15,940 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | 37 | 0 | 0 | 0 | 37 | 0 | 0 | 91 |
| **Finished Petroleum Products** | **106** | **200,352** | **3,935** | **-2,577** | **0** | **-95,278** | **0** | **0** | **6,436** | **100,102** | **129,868** |
| Finished Motor Gasoline | 10 | 95,796 | 110 | -1,285 | 0 | -54,094 | 0 | 0 | 231 | 40,306 | 48,485 |
| Finished Leaded Motor Gasoline | 9 | 14,723 | 0 | -272 | 0 | -6,414 | 0 | 0 | 175 | 7,871 | 9,527 |
| Finished Unleaded Motor Gasoline | 1 | 81,073 | 110 | -1,013 | 0 | -47,680 | 0 | 0 | 57 | 32,434 | 38,958 |
| Finished Aviation Gasoline | 0 | 351 | 0 | 38 | 0 | -247 | 0 | 0 | 0 | 142 | 572 |
| Naphtha-Type Jet Fuel | 0 | 3,027 | 0 | -171 | 0 | -385 | 0 | 0 | 2 | 2,469 | 2,342 |
| Kerosene-Type Jet Fuel | 0 | 17,060 | 265 | 1,499 | 0 | -15,512 | 0 | 0 | 54 | 3,258 | 12,946 |
| Kerosene | 0 | 1,869 | 269 | 306 | 0 | -411 | 0 | 0 | (s) | 2,033 | 2,026 |
| Distillate Fuel Oil | 36 | 39,561 | 0 | -1,142 | 0 | -22,574 | 0 | 0 | 785 | 15,096 | 29,846 |
| Residual Fuel Oil | 0 | 9,172 | 453 | -951 | 0 | 30 | 0 | 0 | 596 | 8,108 | 12,493 |
| Petrochemical Feedstocks[2] | 0 | 7,958 | 2,699 | -490 | 0 | -227 | 0 | 0 | 710 | 9,230 | 2,967 |
| Special Naphthas | 0 | 1,451 | 106 | 45 | 0 | -437 | 0 | 0 | 103 | 1,062 | 1,485 |
| Lubricants | 0 | 3,029 | 0 | -47 | 0 | -1,060 | 0 | 0 | 211 | 1,711 | 6,452 |
| Waxes | 0 | 251 | 1 | -34 | 0 | 0 | 0 | 0 | 29 | 189 | 472 |
| Petroleum Coke | 0 | 7,359 | 28 | -100 | 0 | 0 | 0 | 0 | 3,688 | 3,599 | 4,100 |
| Asphalt and Road Oil | 0 | 3,098 | 4 | -364 | 0 | -338 | 0 | 0 | 2 | 2,398 | 3,980 |
| Still Gas | 0 | 9,122 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9,122 | 0 |
| Miscellaneous Products | 60 | 1,248 | 0 | 119 | 0 | -23 | 0 | 0 | 24 | 1,380 | 1,702 |
| **Total** | **140,987** | **208,847** | **112,931** | **-1,688** | **6,496** | **-129,421** | **0** | **200,412** | **7,397** | **130,342** | **989,545** |

[1] Unaccounted for crude oil is a balancing item.

[2] Includes naphtha less than 400 degrees F endpoint and other oils equal to or greater than 400 degrees F endpoint.

(s) = Less than 500 barrels.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 9. PAD District IV--Supply and Disposition of Crude Oil and Petroleum Products, November 1988
(Thousand Barrels)

| Commodity | Supply | | | | | | Disposition | | | | Ending Stocks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Field Production | Refinery Production | Imports by PADD of Entry | Stock Withdrawal (+) or Addition (-) | Unaccounted For Crude Oil[1] | Net Receipts | Crude Losses | Refinery Inputs | Exports | Products Supplied | |
| **Crude Oil (including lease condensate)** | E **15,753** | **0** | **2,395** | **130** | **2,340** | **-7,369** | **0** | **13,249** | **0** | **0** | **11,729** |
| **Natural Gas Liquids and LRGs** | **3,974** | **166** | **410** | **89** | **0** | **-2,103** | **0** | **713** | **38** | **1,785** | **1,228** |
| Liquefied Petroleum Gases | 3,212 | 166 | 380 | 85 | 0 | -1,951 | 0 | 563 | 38 | 1,291 | 1,083 |
| Pentanes Plus | 762 | 0 | 30 | 4 | 0 | -152 | 0 | 150 | 0 | 494 | 145 |
| **Other Liquids** | **29** | **0** | **0** | **-281** | **0** | **0** | **0** | **-94** | **0** | **-158** | **3,787** |
| Other Hydrocarbons and Alcohol | 29 | 0 | 0 | 5 | 0 | 0 | 0 | 34 | 0 | 0 | 36 |
| Unfinished Oils | 0 | 0 | 0 | 133 | 0 | 0 | 0 | 69 | 0 | 64 | 1,720 |
| Motor Gasoline Blending Components | 0 | 0 | 0 | -419 | 0 | 0 | 0 | -197 | 0 | -222 | 2,031 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Finished Petroleum Products** | **3** | **14,017** | **147** | **-388** | **0** | **-774** | **0** | **0** | **5** | **13,000** | **11,524** |
| Finished Motor Gasoline | 0 | 7,237 | 36 | 23 | 0 | -782 | 0 | 0 | 0 | 6,514 | 4,672 |
| Finished Leaded Motor Gasoline | 0 | 2,607 | 1 | -175 | 0 | -376 | 0 | 0 | 0 | 2,057 | 1,915 |
| Finished Unleaded Motor Gasoline | 0 | 4,630 | 35 | 198 | 0 | -406 | 0 | 0 | 0 | 4,457 | 2,757 |
| Finished Aviation Gasoline | 0 | 12 | 0 | -1 | 0 | 17 | 0 | 0 | 0 | 28 | 49 |
| Naphtha-Type Jet Fuel | 0 | 432 | 0 | 2 | 0 | -115 | 0 | 0 | 1 | 318 | 394 |
| Kerosene-Type Jet Fuel | 0 | 784 | 0 | 22 | 0 | 447 | 0 | 0 | 0 | 1,253 | 699 |
| Kerosene | 0 | -26 | 0 | 46 | 0 | 0 | 0 | 0 | 0 | 20 | 36 |
| Distillate Fuel Oil | 0 | 3,632 | 110 | -187 | 0 | -341 | 0 | 0 | 0 | 3,214 | 2,730 |
| Residual Fuel Oil | 0 | 351 | 0 | -32 | 0 | 0 | 0 | 0 | 0 | 319 | 627 |
| Petrochemical Feedstocks[2] | 0 | 19 | 0 | -4 | 0 | 0 | 0 | 0 | 1 | 14 | 30 |
| Special Naphthas | 0 | -5 | 0 | 1 | 0 | 0 | 0 | 0 | (s) | -4 | 7 |
| Lubricants | 0 | 9 | 0 | 22 | 0 | 0 | 0 | 0 | 2 | 29 | 78 |
| Waxes | 0 | 59 | 1 | -20 | 0 | 0 | 0 | 0 | 0 | 40 | 100 |
| Petroleum Coke | 0 | 338 | 0 | -4 | 0 | 0 | 0 | 0 | 0 | 334 | 18 |
| Asphalt and Road Oil | 0 | 547 | 0 | -259 | 0 | 0 | 0 | 0 | 1 | 287 | 2,024 |
| Still Gas | 0 | 560 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 560 | 0 |
| Miscellaneous Products | 3 | 68 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 74 | 60 |
| **Total** | **19,759** | **14,183** | **2,952** | **-450** | **2,340** | **-10,246** | **0** | **13,868** | **43** | **14,627** | **28,268** |

[1] Unaccounted for crude oil is a balancing item.

[2] Includes naphtha less than 400 degrees F endpoint and other oils equal to or greater than 400 degrees F endpoint

(s) = Less than 500 barrels

E = Estimated

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures. See Explanatory Notes 1 and 2

## Table 10. PAD District V--Supply and Disposition of Crude Oil and Petroleum Products, November 1988

(Thousand Barrels)

| Commodity | Supply | | | | | | Disposition | | | | Ending Stocks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Field Production | Refinery Production | Imports by PADD of Entry | Stock Withdrawal (+) or Addition (-) | Unaccounted For Crude Oil[1] | Net Receipts | Crude Losses | Refinery Inputs | Exports | Products Supplied | |
| **Crude Oil (including lease condensate)** | E 92,343 | 0 | 7,693 | 2,147 | -2,801 | -15,526 | 2 | 78,377 | 4,158 | 1,319 | 81,531 |
| **Natural Gas Liquids and LRGs** | **2,558** | **1,424** | **655** | **680** | **0** | **0** | **0** | **1,152** | **299** | **3,867** | **3,824** |
| Liquefied Petroleum Gases | 1,223 | 1,424 | 655 | 625 | 0 | 0 | 0 | 1,013 | 299 | 2,616 | 3,753 |
| Pentanes Plus | 1,335 | 0 | 0 | 55 | 0 | 0 | 0 | 139 | 0 | 1,251 | 71 |
| **Other Liquids** | **179** | **0** | **0** | **767** | **0** | **154** | **0** | **600** | **0** | **500** | **34,830** |
| Other Hydrocarbons and Alcohol | 179 | 0 | 0 | 199 | 0 | 0 | 0 | 378 | 0 | 0 | 5 |
| Unfinished Oils | 0 | 0 | 0 | 811 | 0 | 154 | 0 | 350 | 0 | 615 | 26,816 |
| Motor Gasoline Blending Components | 0 | 0 | 0 | -248 | 0 | 0 | 0 | -145 | 0 | -103 | 7,976 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 17 | 0 | -12 | 33 |
| **Finished Petroleum Products** | **0** | **82,938** | **984** | **-2,077** | **0** | **3,185** | **0** | **0** | **7,220** | **77,810** | **61,175** |
| Finished Motor Gasoline | 0 | 35,422 | 207 | 116 | 0 | 2,065 | 0 | 0 | 202 | 37,608 | 22,970 |
| Finished Leaded Motor Gasoline | 0 | 8,519 | 26 | 318 | 0 | 692 | 0 | 0 | 1 | 9,554 | 6,460 |
| Finished Unleaded Motor Gasoline | 0 | 26,903 | 181 | -202 | 0 | 1,373 | 0 | 0 | 201 | 28,054 | 16,510 |
| Finished Aviation Gasoline | 0 | 116 | 6 | 7 | 0 | 0 | 0 | 0 | 0 | 129 | 428 |
| Naphtha-Type Jet Fuel | 0 | 1,550 | 3 | -20 | 0 | 354 | 0 | 0 | 0 | 1,887 | 1,807 |
| Kerosene-Type Jet Fuel | 0 | 9,585 | 296 | -629 | 0 | 205 | 0 | 0 | 215 | 9,242 | 7,718 |
| Kerosene | 0 | 139 | 0 | 13 | 0 | 0 | 0 | 0 | (s) | 152 | 219 |
| Distillate Fuel Oil | 0 | 13,409 | 81 | -884 | 0 | 607 | 0 | 0 | 231 | 12,982 | 12,412 |
| Residual Fuel Oil | 0 | 11,865 | 292 | -844 | 0 | 0 | 0 | 0 | 3,778 | 7,535 | 9,930 |
| Petrochemical Feedstocks[2] | 0 | 437 | 42 | -27 | 0 | 0 | 0 | 0 | 98 | 354 | 330 |
| Special Naphthas | 0 | 87 | 5 | -4 | 0 | 0 | 0 | 0 | 108 | -20 | 133 |
| Lubricants | 0 | 379 | 30 | 192 | 0 | -46 | 0 | 0 | 119 | 436 | 1,326 |
| Waxes | 0 | 64 | 5 | 10 | 0 | 0 | 0 | 0 | 8 | 71 | 89 |
| Petroleum Coke | 0 | 4,066 | 17 | 79 | 0 | 0 | 0 | 0 | 2,452 | 1,710 | 1,930 |
| Asphalt and Road Oil | 0 | 1,496 | 0 | -151 | 0 | 0 | 0 | 0 | 2 | 1,343 | 1,565 |
| Still Gas | 0 | 4,188 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,188 | 0 |
| Miscellaneous Products | 0 | 135 | 0 | 65 | 0 | 0 | 0 | 0 | 7 | 193 | 318 |
| **Total** | **95,080** | **84,362** | **9,332** | **1,517** | **-2,801** | **-12,187** | **2** | **80,129** | **11,677** | **83,496** | **181,360** |

[1] Unaccounted for crude oil is a balancing item.

[2] Includes naphtha less than 400 degrees F endpoint and other oils equal to or greater than 400 degrees F endpoint.

(s) Less than 500 barrels.

E - Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 11. Production of Crude Oil by PAD District and State
(Thousand Barrels)

| PAD District and State | September 1988 | | January - September | |
|---|---|---|---|---|
| | Total | Daily Average | Total | Daily Average |
| **PAD District I, Total** | **E 1,098** | **E 37** | **E 10,568** | **E 39** |
| Florida | 627 | 21 | 5,997 | 22 |
| New York | E 45 | E 2 | E 437 | E 2 |
| Pennsylvania | E 232 | E 8 | E 2,186 | E 8 |
| Virginia | E 1 | E 0 | E 14 | E 0 |
| West Virginia | 209 | 7 | 2,001 | 7 |
| Adjustment [1] | -16 | -1 | -67 | (s) |
| **PAD District II, Total** | **E 24,366** | **E 812** | **E 229,787** | **E 839** |
| Illinois | 1,925 | 64 | 17,890 | 65 |
| Indiana | 298 | 10 | 2,950 | 11 |
| Kansas | 4,737 | 158 | 44,083 | 161 |
| Kentucky | 454 | 15 | 4,107 | 15 |
| Michigan | E 1,896 | E 63 | E 17,835 | E 65 |
| Missouri | 11 | (s) | E 96 | E 0 |
| Nebraska | 501 | 17 | 4,402 | 16 |
| North Dakota | 3,174 | 106 | 29,734 | 109 |
| Ohio | E 879 | E 29 | E 8,086 | E 30 |
| Oklahoma | 10,241 | 341 | 97,359 | 355 |
| South Dakota | 132 | 4 | 1,247 | 5 |
| Tennessee | 50 | 2 | E 453 | E 2 |
| Adjustment [1] | 68 | 2 | 1,545 | 6 |
| **PAD District III, Total** | **E 102,882** | **E 3,429** | **E 997,835** | **E 3,642** |
| Alabama | 1,754 | 58 | 15,655 | 57 |
| Arkansas | E 1,095 | E 37 | E 10,284 | E 38 |
| Louisiana [2] | E 12,231 | E 408 | E 124,016 | E 453 |
| Mississippi | 2,240 | 75 | 20,631 | 75 |
| New Mexico | 5,743 | 191 | 52,997 | 193 |
| Texas [2] | 58,930 | 1,964 | 552,960 | 2,018 |
| Federal Offshore PAD District III | 20,132 | 671 | E 218,047 | E 796 |
| Adjustment [1] | 757 | 25 | 3,245 | 12 |
| **PAD District IV, Total** | **E 15,996** | **E 533** | **E 152,870** | **E 558** |
| Colorado | E 2,664 | E 89 | E 24,116 | E 88 |
| Montana | 1,878 | 63 | E 17,615 | E 64 |
| Utah | 2,638 | 88 | 25,237 | 92 |
| Wyoming | 8,974 | 299 | 85,723 | 313 |
| Adjustment [1] | -158 | -5 | 179 | 1 |
| **PAD District V, Total** | **92,652** | **3,088** | **850,015** | **3,102** |
| Alaska [2] | 60,585 | 2,020 | 553,168 | 2,019 |
| South Alaska | 1,309 | 44 | 11,789 | 43 |
| North Slope | 59,277 | 1,976 | 541,386 | 1,976 |
| Adjustment for Alaska [1] | -1 | (s) | -7 | (s) |
| Arizona | 10 | (s) | 86 | (s) |
| California [2] | 28,861 | 962 | 267,939 | 978 |
| Nevada | 275 | 9 | 2,398 | 9 |
| Federal Offshore PAD District V | 2,540 | 85 | 23,535 | 86 |
| Adjustment for Arizona, California, and Nevada [1] | 381 | 13 | 2,889 | 11 |
| **U.S. Total[2]** | **E 236,994** | **E 7,900** | **E 2,241,075** | **E 8,179** |

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[1] These adjustments are used to reconcile the national and PAD District level sums of the State data with the independently estimated U.S. and Alaskan figures shown in the Summary Statistics portion of this issue and with the PAD District level figures published in a previous issue. Final data at the State, PAD District, and national levels will be published without adjustments in the *Petroleum Supply Annual.*

[2] Includes the following current month offshore production (thousand barrels): Alaska: State - 4,077; California: State - 2,330; Louisiana: State - 1,846; Texas: State - 61; U.S. Total, including Federal offshore - E30,986.

(s) = Less than 500 barrels or less than 500 barrels per day.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Source: State Conservation Agencies and the U.S. Minerals Management Service.

## Table 12. Natural Gas Processing Plant Net Production of Petroleum Products by PAD District, November 1988
(Thousand Barrels)

| Commodity | PAD District I |  |  | PAD District II |  |  |  | PAD District III |  |  |  |  |  | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | East Coast | Appalachian No.1 | Total | Ind., Ill., Ky * | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast |  |
| **Natural Gas Liquids** | **227** | **620** | **847** | **801** | **430** | **8,199** | **9,430** | **18,373** | **2,761** | **7,526** | **655** | **3,761** | **33,076** | **3,974** | **2,558** | **49,885** |
| Pentanes Plus | 32 | 73 | 105 | 151 | 105 | 1,166 | 1,422 | 3,285 | 167 | 1,328 | 177 | 419 | 5,376 | 762 | 1,335 | 9,000 |
| Liquefied Petroleum Gases | 195 | 547 | 742 | 650 | 325 | 7,033 | 8,008 | 15,088 | 2,594 | 6,198 | 478 | 3,342 | 27,700 | 3,212 | 1,223 | 40,885 |
| Ethane | 74 | 176 | 250 | 141 | 0 | 2,608 | 2,749 | 6,319 | 1,138 | 2,793 | 118 | 1,685 | 12,053 | 1,126 | 1 | 16,179 |
| Propane | 73 | 254 | 327 | 302 | 197 | 2,909 | 3,408 | 5,600 | 1,138 | 2,043 | 195 | 1,096 | 10,072 | 1,318 | 330 | 15,455 |
| Normal Butane | 48 | 84 | 132 | 106 | 122 | 983 | 1,211 | 2,301 | -1,058 | 733 | 117 | 372 | 2,465 | 528 | 657 | 4,993 |
| Isobutane | 0 | 33 | 33 | 101 | 6 | 533 | 640 | 868 | 1,376 | 629 | 48 | 189 | 3,110 | 240 | 235 | 4,258 |
| **Finished Petroleum Products** | **0** | **0** | **0** | **2** | **0** | **2** | **4** | **51** | **44** | **1** | **10** | **0** | **106** | **3** | **0** | **113** |
| Finished Motor Gasoline | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 9 | 0 | 0 | 0 | 10 | 0 | 0 | 10 |
| Finished Leaded Motor Gasoline | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 9 | 0 | 0 | 9 |
| Finished Unleaded Motor Gasoline | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| Finished Aviation Gasoline | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Naphtha-Type Jet Fuel | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Kerosene-Type Jet Fuel | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Kerosene | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Distillate Fuel Oil | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 35 | 1 | 0 | 0 | 36 | 0 | 0 | 36 |
| Special Naphthas | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Miscellaneous Products | 0 | 0 | 0 | 2 | 0 | 2 | 4 | 50 | 0 | 0 | 10 | 0 | 60 | 3 | 0 | 67 |
| **Total Production** | **227** | **620** | **847** | **803** | **430** | **8,201** | **9,434** | **18,424** | **2,805** | **7,527** | **665** | **3,761** | **33,182** | **3,977** | **2,558** | **49,998** |

* Effective January 1987 "Appalachian No.2" is combined with "Ind., Ill., Ky.".
Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 13. Refinery Input of Crude Oil and Petroleum Products by PAD District, November 1988

(Thousand Barrels, Except Where Noted)

| Commodity | PAD District I | | | PAD District II | | | | PAD District III | | | | | | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | East Coast | Appalachian No.1 | Total | Ind., Ill., Ky. * | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast | |
| **Crude Oil (including lease condensate)** | **33,860** | **3,139** | **36,999** | **58,377** | **9,204** | **18,927** | **86,508** | **14,651** | **89,550** | **69,163** | **5,395** | **1,986** | **180,745** | **13,249** | **78,377** | **395,878** |
| **Natural Gas Liquids** | | | | | | | | | | | | | | | | |
| Pentanes Plus | 15 | 0 | 15 | 401 | 265 | 918 | 1,584 | 973 | 1,509 | 418 | 180 | 117 | 3,197 | 150 | 139 | 5,085 |
| Liquefied Petroleum Gases | 236 | 78 | 314 | 2,637 | 335 | 1,017 | 3,989 | 991 | 2,847 | 2,746 | 171 | 109 | 6,864 | 563 | 1,013 | 12,743 |
| Ethane | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 84 | 0 | 0 | 84 | 0 | 0 | 84 |
| Propane | 0 | 0 | 0 | 81 | 0 | 0 | 81 | 0 | 130 | 70 | 0 | 0 | 200 | 0 | 0 | 281 |
| Normal Butane | 137 | 78 | 215 | 1,600 | 268 | 566 | 2,434 | 621 | 1,600 | 1,431 | 40 | 62 | 3,754 | 474 | 852 | 7,729 |
| Isobutane | 99 | 0 | 99 | 956 | 67 | 451 | 1,474 | 370 | 1,117 | 1,161 | 131 | 47 | 2,826 | 89 | 161 | 4,649 |
| **Other Liquids** | | | | | | | | | | | | | | | | |
| Other Hydrocarbons and Alcohol | 0 | 0 | 0 | 343 | 2 | 25 | 370 | 0 | 657 | 412 | 0 | 30 | 1,099 | 34 | 378 | 1,881 |
| Unfinished Oil (net) | 5,871 | 185 | 6,056 | -715 | -156 | 1,203 | 332 | 454 | 9,101 | -1,460 | -69 | -20 | 8,006 | 69 | 350 | 14,813 |
| Motor Gasoline Blending Components (net) | 414 | -35 | 379 | 1,672 | -128 | 381 | 1,925 | 163 | -297 | 604 | 9 | -15 | 464 | -197 | -145 | 2,426 |
| Aviation Gasoline Blending Components (net) | 0 | 0 | 0 | 3 | 0 | -15 | -12 | 0 | 21 | 16 | 0 | 0 | 37 | 0 | 17 | 42 |
| **Total Input to Refineries** | **40,396** | **3,367** | **43,763** | **62,718** | **9,522** | **22,456** | **94,696** | **17,232** | **103,388** | **71,899** | **5,686** | **2,207** | **200,412** | **13,868** | **80,129** | **432,868** |
| **Crude Oil Distillation** | | | | | | | | | | | | | | | | |
| Gross Input (daily average) | 1,134 | 105 | 1,239 | 1,953 | 306 | 633 | 2,891 | 489 | 3,021 | 2,339 | 177 | 67 | 6,094 | 448 | 2,669 | 13,341 |
| Operable Capacity (daily average) | 1,354 | 109 | 1,463 | 2,253 | 332 | 734 | 3,319 | 557 | 3,603 | 2,925 | 255 | 76 | 7,415 | 541 | 3,171 | 15,909 |
| Operating Ratio (percent)[1] | 83.8 | 95.9 | 84.7 | 86.7 | 92.0 | 86.2 | 87.1 | 87.8 | 83.8 | 80.0 | 69.4 | 89.1 | 82.2 | 82.9 | 84.2 | 83.9 |
| **Downstream Processing** | | | | | | | | | | | | | | | | |
| **Fresh Feed Input (daily average)** | | | | | | | | | | | | | | | | |
| Catalytic Cracking | 520 | 17 | 538 | 652 | 107 | 234 | 992 | 188 | 1,274 | 660 | 29 | 23 | 2,174 | 157 | 633 | 4,494 |
| Catalytic Hydrocracking | 36 | 0 | 36 | 100 | 0 | 5 | 105 | 16 | 113 | 216 | 3 | 0 | 348 | 7 | 391 | 887 |
| Cokers | 70 | 0 | 70 | 145 | 54 | 66 | 265 | 8 | 181 | 367 | 12 | 0 | 568 | 18 | 474 | 1,394 |
| **Crude Oil Qualities** | | | | | | | | | | | | | | | | |
| Sulfur Content, Weighted Average (percent) | 1.16 | .54 | 1.11 | .89 | 1.87 | .57 | .93 | .84 | .88 | 1.22 | 1.40 | .77 | 1.02 | .67 | 1.09 | 1.01 |
| API Gravity, Weighted Average | 30.34 | 38.36 | 31.01 | 35.55 | 29.70 | 37.12 | 35.27 | 38.84 | 33.69 | 31.17 | 33.08 | 39.82 | 33.19 | 36.37 | 25.37 | 32.01 |
| **Operable Capacity (daily average)** | **1,354** | **109** | **1,463** | **2,253** | **332** | **734** | **3,319** | **557** | **3,603** | **2,925** | **255** | **76** | **7,415** | **541** | **3,171** | **15,909** |
| Operating | 1,330 | 109 | 1,439 | 2,187 | 332 | 734 | 3,253 | 533 | 3,412 | 2,588 | 207 | 76 | 6,815 | 533 | 3,047 | 15,086 |
| Idle | 24 | 0 | 24 | 66 | 0 | 0 | 66 | 24 | 191 | 337 | 48 | 0 | 601 | 8 | 124 | 823 |
| **Alaskan Crude Oil Receipts** | **1,463** | **0** | **1,463** | **1,185** | **0** | **419** | **1,604** | **0** | **4,836** | **1,567** | **0** | **0** | **6,403** | **0** | **37,170** | **46,640** |

[1] Represents gross input divided by operable capacity

(s) = Less than 500 barrels

* Effective January 1987 "Appalachian No.2" is combined with "Ind., Ill., Ky."

Sources and estimation procedures: See Explanatory Notes 1 and 2

## Table 14. Refinery Net Production of Petroleum Products by PAD District, November 1988

(Thousand Barrels)

| Commodity | PAD District I | | | PAD District II | | | | PAD District III | | | | | | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | East Coast | Appalachian No.1 | Total | Ind., Ill., Ky. * | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast | |
| Liquefied Refinery Gases | 1,635 | 28 | 1,663 | 1,879 | 223 | 184 | 2,286 | 149 | 3,939 | 4,249 | 85 | 73 | 8,495 | 166 | 1,424 | 14,034 |
| Ethane | 154 | 0 | 154 | 0 | 0 | 0 | 0 | -51 | 215 | 1 | 0 | 0 | 165 | 0 | 42 | 361 |
| Propane | 1,367 | 28 | 1,395 | 1,872 | 260 | 384 | 2,516 | 368 | 3,073 | 2,000 | 72 | 64 | 5,577 | 200 | 1,098 | 10,786 |
| Normal Butane | 106 | 0 | 106 | -13 | -24 | -200 | -237 | -320 | 630 | 2,205 | 13 | 5 | 2,533 | -22 | 238 | 2,618 |
| Isobutane | 8 | 0 | 8 | 20 | -13 | 0 | 7 | 152 | 21 | 43 | 0 | 4 | 220 | -12 | 46 | 269 |
| Finished Motor Gasoline | 18,582 | 1,273 | 19,855 | 35,444 | 5,181 | 12,752 | 53,377 | 9,654 | 49,492 | 33,614 | 1,737 | 1,299 | 95,796 | 7,237 | 35,422 | 211,687 |
| Finished Leaded Motor Gasoline | 1,269 | 197 | 1,466 | 4,333 | 986 | 3,284 | 8,603 | 2,180 | 6,907 | 4,988 | 201 | 447 | 14,723 | 2,607 | 8,519 | 35,918 |
| Finished Unleaded Motor Gasoline | 17,313 | 1,076 | 18,389 | 31,111 | 4,195 | 9,468 | 44,774 | 7,474 | 42,585 | 28,626 | 1,536 | 852 | 81,073 | 4,630 | 26,903 | 175,769 |
| Finished Aviation Gasoline | 0 | 0 | 0 | 80 | 21 | 15 | 116 | 124 | 66 | 161 | 0 | 0 | 351 | 12 | 116 | 595 |
| Naphtha-Type Jet Fuel | 869 | 0 | 869 | 365 | 27 | 305 | 697 | 925 | 964 | 781 | 216 | 141 | 3,027 | 432 | 1,550 | 6,575 |
| Kerosene-Type Jet Fuel | 1,568 | 0 | 1,568 | 3,114 | 372 | 1,058 | 4,544 | 1,067 | 7,272 | 8,583 | 101 | 37 | 17,060 | 784 | 9,585 | 33,541 |
| Kerosene | 201 | 80 | 281 | 677 | 54 | -22 | 709 | 15 | 1,213 | 603 | 38 | 0 | 1,869 | -26 | 139 | 2,972 |
| Distillate Fuel Oil | 8,882 | 1,070 | 9,952 | 12,745 | 2,386 | 5,424 | 20,555 | 3,297 | 20,449 | 13,825 | 1,472 | 518 | 39,561 | 3,632 | 13,409 | 87,109 |
| Residual Fuel Oil | 3,708 | 107 | 3,815 | 2,035 | 262 | 199 | 2,496 | 530 | 5,653 | 2,618 | 356 | 15 | 9,172 | 351 | 11,865 | 27,699 |
| Naphtha < 400 Deg. for Petro. Feed. Use | 213 | 0 | 213 | 662 | 0 | 107 | 769 | 154 | 1,686 | 98 | 32 | 0 | 1,970 | 9 | 115 | 3,076 |
| Other Oils > 400 Deg. for Petro. Feed. Use | 10 | 0 | 10 | 600 | 0 | 56 | 656 | 117 | 3,989 | 1,882 | 0 | 0 | 5,988 | 10 | 322 | 6,986 |
| Special Naphthas | 385 | 36 | 421 | 301 | 0 | 234 | 535 | 99 | 1,146 | 40 | 166 | 0 | 1,451 | -5 | 87 | 2,489 |
| Lubricants | 425 | 332 | 757 | 513 | 0 | 275 | 788 | 24 | 1,895 | 715 | 395 | 0 | 3,029 | 9 | 379 | 4,962 |
| Waxes | 0 | 77 | 77 | 21 | 0 | 31 | 52 | 10 | 135 | 64 | 42 | 0 | 251 | 59 | 64 | 503 |
| Petroleum Coke | 1,418 | 26 | 1,444 | 2,199 | 540 | 746 | 3,485 | 325 | 3,107 | 3,762 | 146 | 19 | 7,359 | 338 | 4,066 | 16,692 |
| Marketable | 483 | 0 | 483 | 1,254 | 402 | 496 | 2,152 | 31 | 1,454 | 2,856 | 93 | 0 | 4,434 | 152 | 3,112 | 10,333 |
| Catalyst | 935 | 26 | 961 | 945 | 138 | 250 | 1,333 | 294 | 1,653 | 906 | 53 | 19 | 2,925 | 186 | 954 | 6,359 |
| Asphalt and Road Oil | 2,743 | 197 | 2,940 | 1,562 | 593 | 801 | 2,956 | 430 | 716 | 1,087 | 791 | 74 | 3,098 | 547 | 1,496 | 11,037 |
| Still Gas | 1,619 | 141 | 1,760 | 2,861 | 317 | 1,042 | 4,220 | 705 | 5,150 | 3,009 | 187 | 71 | 9,122 | 560 | 4,188 | 19,850 |
| Miscellaneous Products | 383 | 38 | 421 | 285 | 38 | 67 | 390 | -2 | 770 | 480 | 0 | 0 | 1,248 | 68 | 135 | 2,262 |
| Fuel Use | 12 | 1 | 13 | 0 | 0 | 0 | 0 | 4 | 0 | 38 | 0 | 0 | 42 | 0 | 7 | 62 |
| Non-Fuel Use | 371 | 37 | 408 | 285 | 38 | 67 | 390 | -6 | 770 | 442 | 0 | 0 | 1,206 | 68 | 128 | 2,200 |
| **Total Production** | **42,641** | **3,405** | **46,046** | **65,343** | **10,014** | **23,274** | **98,631** | **17,623** | **107,642** | **75,571** | **5,764** | **2,247** | **208,847** | **14,183** | **84,362** | **452,069** |
| Processing Gain(-) or Loss(+)[1] | -2,245 | -38 | -2,283 | -2,625 | -492 | -818 | -3,935 | -391 | -4,254 | -3,672 | -78 | -40 | -8,435 | -315 | -4,233 | -19,201 |

[1] Represents the arithmetic difference between input and output.

* Effective January 1987 "Appalachian No.2" is combined with "Ind., Ill., Ky.".

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 15. Percent Refinery Yield of Petroleum Products by PAD District,[1] November 1988

| Commodity | PAD District I |  |  | PAD District II |  |  |  | PAD District III |  |  |  |  |  | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | East Coast | Appalachian No.1 | Total | Ind., Ill., Ky. * | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N. La., Ark. | New Mexico | Total | Rocky Mt | West Coast |  |
| Liquefied Refinery Gases | 4.1 | 0.8 | 3.9 | 3.3 | 2.5 | 0.9 | 2.6 | 1.0 | 4.0 | 6.3 | 1.6 | 3.7 | 4.5 | 1.2 | 1.8 | 3.4 |
| Finished Motor Gasoline[2] | 45.1 | 37.0 | 44.5 | 52.7 | 52.0 | 51.7 | 52.4 | 49.8 | 45.4 | 43.5 | 25.9 | 53.8 | 44.6 | 50.2 | 43.2 | 46.2 |
| Finished Aviation Gasoline[3] | .0 | .0 | .0 | .1 | 2 | .1 | .1 | 8 | .0 | .2 | .0 | 0 | .2 | 1 | 1 | 1 |
| Naphtha-Type Jet Fuel | 2.2 | 0 | 2.0 | 6 | .3 | 1.5 | .8 | 6.1 | 1.0 | 1.2 | 4.1 | 7.2 | 1.6 | 3.2 | 2.0 | 1.6 |
| Kerosene-Type Jet Fuel | 3.9 | .0 | 3.6 | 5.4 | 4.1 | 5.3 | 5.2 | 7.1 | 7.4 | 12.7 | 1.9 | 1.9 | 9.0 | 5.9 | 12.2 | 8.2 |
| Kerosene | .5 | 2.4 | 7 | 1.2 | .6 | -.1 | .8 | .1 | 1.2 | 9 | .7 | 0 | 1.0 | -2 | 2 | 7 |
| Distillate Fuel Oil | 22.4 | 32.2 | 23.1 | 22.1 | 26.4 | 26.9 | 23.7 | 21.8 | 20.7 | 20.4 | 27.6 | 26.3 | 21.0 | 27.3 | 17.0 | 21.2 |
| Residual Fuel Oil | 9.3 | 3.2 | 8.9 | 3.5 | 2.9 | 1.0 | 2.9 | 3.5 | 5.7 | 3.9 | 6.7 | .8 | 4.9 | 2.6 | 15.1 | 6.7 |
| Naphtha < 400 Deg. for Petro. Feed. Use | .5 | 0 | .5 | 1.1 | 0 | .5 | .9 | 1.0 | 1.7 | 1 | .6 | 0 | 1.0 | 1 | 1 | 7 |
| Other Oils > 400 Deg. for Petro. Feed. Use | .0 | 0 | 0 | 1.0 | 0 | .3 | .8 | .8 | 4.0 | 2.8 | 0 | 0 | 3.2 | 1 | 4 | 1.7 |
| Special Naphthas | 1.0 | 1.1 | 1.0 | .5 | 0 | 1.2 | 6 | .7 | 1.2 | .1 | 3.1 | 0 | .8 | .0 | 1 | 6 |
| Lubricants | 1.1 | 10.0 | 1.8 | 9 | 0 | 1.4 | .9 | 2 | 1.9 | 1.1 | 7.4 | 0 | 1.6 | 1 | 5 | 1.2 |
| Waxes | 0 | 2.3 | 2 | 0 | 0 | 2 | .1 | .1 | 1 | 1 | 8 | 0 | 1 | 4 | 1 | 1 |
| Petroleum Coke | 3.6 | .8 | 3.4 | 3.8 | 6.0 | 3.7 | 4.0 | 2.2 | 3.1 | 5.6 | 2.7 | 1.0 | 3.9 | 2.5 | 5.2 | 4.1 |
| Asphalt and Road Oil | 6.9 | 5.9 | 6.8 | 2.7 | 6.6 | 4.0 | 3.4 | 2.8 | 7 | 1.6 | 14.9 | 3.8 | 1.6 | 4.1 | 1.9 | 2.7 |
| Still Gas | 4.1 | 4.2 | 4.1 | 5.0 | 3.5 | 5.2 | 4.9 | 4.7 | 5.2 | 4.4 | 3.5 | 3.6 | 4.8 | 4.2 | 5.3 | 4.8 |
| Miscellaneous Products | 1.0 | 1.1 | 1.0 | 5 | 4 | .3 | 4 | 0 | 8 | 7 | 0 | 0 | 7 | 5 | 2 | 6 |
| Processing Gain(-) or Loss(+)[4] | -5.7 | -1.1 | -5.3 | -4.6 | -5.4 | -4.1 | -4.5 | -2.6 | -4.3 | -5.4 | -1.5 | -2.0 | -4.5 | -2.4 | -5.4 | -4.7 |

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[1] Based on crude oil input and net reruns of unfinished oils

[2] Based on total finished motor gasoline output plus net output of motor gasoline blending components, minus input of natural gas plant liquids, other hydrocarbons and alcohol

[3] Based on finished aviation gasoline output plus net output of aviation gasoline blending components

[4] Represents the difference between Input and Production

Note: Total may not equal sum of components due to independent rounding

* Effective January 1987 "Appalachian No 2" is combined with "Ind., Ill., Ky."

Sources and estimation procedures See Explanatory Notes 1 and 2

## Table 16. Imports of Crude Oil and Petroleum Products by PAD District, November 1988
(Thousand Barrels)

| Commodity | Petroleum Administration for Defense Districts | | | | | | Daily Average |
|---|---|---|---|---|---|---|---|
| | I | II | III | IV | V | Total | |
| **Crude Oil (including lease condensate)** [1] [2] | 28,248 | 28,069 | 84,092 | 2,395 | 7,693 | 150,497 | 5,017 |
| **Natural Gas Liquids** | 2,067 | 3,819 | 1,427 | 410 | 655 | 8,379 | 279 |
| Pentanes Plus | 494 | 32 | 88 | 30 | 0 | 644 | 21 |
| Liquefied Petroleum Gases | 1,573 | 3,787 | 1,339 | 380 | 655 | 7,735 | 258 |
| Ethane | 1 | 47 | 205 | 0 | 1 | 254 | 8 |
| Propane | 874 | 2,267 | 0 | 188 | 30 | 3,360 | 112 |
| Normal Butane | 454 | 957 | 737 | 125 | 406 | 2,679 | 89 |
| Isobutane | 244 | 515 | 397 | 67 | 218 | 1,442 | 48 |
| **Other Liquids** [1] | 5,012 | 20 | 9,495 | 0 | 0 | 14,527 | 484 |
| Unfinished Oils [1] | 3,729 | 0 | 8,911 | 0 | 0 | 12,640 | 421 |
| Naphthas and Lighter | 142 | 0 | 2,420 | 0 | 0 | 2,562 | 85 |
| Kerosene and Light Gas Oils | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Heavy Gas Oils | 3,208 | 0 | 2,074 | 0 | 0 | 5,282 | 176 |
| Residuum | 379 | 0 | 4,417 | 0 | 0 | 4,796 | 160 |
| Motor Gasoline Blending Components | 1,283 | 20 | 584 | 0 | 0 | 1,887 | 63 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Finished Petroleum Products** | 46,988 | 860 | 3,935 | 147 | 984 | 52,914 | 1,764 |
| Finished Motor Gasoline | 13,011 | 176 | 110 | 36 | 207 | 13,540 | 451 |
| Finished Leaded Motor Gasoline | 373 | 0 | 0 | 1 | 26 | 400 | 13 |
| Finished Unleaded Motor Gasoline | 12,638 | 176 | 110 | 35 | 181 | 13,140 | 438 |
| Finished Aviation Gasoline | 0 | 0 | 0 | 0 | 6 | 6 | (s) |
| Naphtha-Type Jet Fuel | 0 | 77 | 0 | 0 | 3 | 80 | 3 |
| Kerosene-Type Jet Fuel | 1,722 | 0 | 265 | 0 | 296 | 2,283 | 76 |
| Bonded Aircraft Fuel | 778 | 0 | 126 | 0 | 274 | 1,178 | 39 |
| Other | 944 | 0 | 139 | 0 | 22 | 1,105 | 37 |
| Kerosene | 260 | 0 | 269 | 0 | 0 | 529 | 18 |
| Distillate Fuel Oil | 8,869 | 180 | 0 | 110 | 81 | 9,240 | 308 |
| Bonded Ships Bunkers | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 8,869 | 180 | 0 | 110 | 81 | 9,240 | 308 |
| Residual Fuel Oil | 21,909 | 288 | 453 | 0 | 292 | 22,942 | 765 |
| Bonded Ships Bunkers | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 21,909 | 288 | 453 | 0 | 292 | 22,942 | 765 |
| Naphtha < 400 Deg. for Petro. Feed. Use | 197 | 23 | 2,699 | 0 | 42 | 2,961 | 99 |
| Other Oils > 400 Deg. for Petro. Feed. Use | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Special Naphthas | 4 | 68 | 106 | 0 | 5 | 183 | 6 |
| Lubricants | 205 | 18 | 0 | 0 | 30 | 253 | 8 |
| Waxes | 24 | 23 | 1 | 1 | 5 | 54 | 2 |
| Petroleum Coke | 0 | 0 | 28 | 0 | 17 | 45 | 2 |
| Asphalt and Road Oil | 760 | 3 | 4 | 0 | 0 | 767 | 26 |
| Miscellaneous Products | 27 | 4 | 0 | 0 | 0 | 31 | 1 |
| **Total Imports** | 82,314 | 32,768 | 98,950 | 2,952 | 9,332 | 226,317 | 7,544 |

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[1] Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

[2] Includes crude oil imported for storage in the Strategic Petroleum Reserve.

(s) = Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 17. Year-to-Date Imports of Crude Oil and Petroleum Products by PAD District,
(Thousand Barrels)

| Commodity | Petroleum Administration for Defense Districts | | | | | | Total (Daily Average) |
|---|---|---|---|---|---|---|---|
| | I | II | III | IV | V | Total | |
| **Crude Oil (including lease condensate)** [1] [2] | **386,327** | **306,478** | **913,204** | **21,022** | **57,574** | **1,684,605** | **5,029** |
| **Natural Gas Liquids** | **14,679** | **30,188** | **21,176** | **4,233** | **3,357** | **73,632** | **220** |
| Pentanes plus | 2,899 | 370 | 315 | 299 | 0 | 3,883 | 12 |
| Liquefied Petroleum Gases | 11,780 | 29,818 | 20,861 | 3,934 | 3,357 | 69,749 | 208 |
| Ethane | 100 | 238 | 267 | 1 | 40 | 647 | 2 |
| Propane | 7,306 | 19,577 | 6,107 | 2,001 | 444 | 35,436 | 106 |
| Normal Butane | 2,749 | 6,338 | 9,293 | 1,219 | 1,829 | 21,428 | 64 |
| Isobutane | 1,625 | 3,664 | 5,193 | 712 | 1,043 | 12,238 | 37 |
| **Other Liquids** [1] | **56,780** | **1,146** | **80,284** | **0** | **1,175** | **139,385** | **416** |
| Unfinished Oils [1] | 40,171 | 1,105 | 78,034 | 0 | 855 | 120,165 | 359 |
| Naphthas and Lighter | 1,926 | 238 | 17,371 | 0 | 254 | 19,789 | 59 |
| Kerosene and Light Gas Oils | 217 | 0 | 1,710 | 0 | 0 | 1,927 | 6 |
| Heavy Gas Oils | 30,160 | 499 | 12,824 | 0 | 357 | 43,840 | 131 |
| Residuum | 7,868 | 368 | 46,129 | 0 | 244 | 54,609 | 163 |
| Motor Gasoline Blending Components | 16,609 | 41 | 2,250 | 0 | 320 | 19,220 | 57 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Finished Petroleum Products** | **418,827** | **11,136** | **39,544** | **1,396** | **18,326** | **489,229** | **1,460** |
| Finished Motor Gasoline | 119,685 | 1,311 | 3,119 | 532 | 7,471 | 132,118 | 394 |
| Finished Leaded Motor Gasoline | 3,587 | 27 | 39 | 28 | 248 | 3,929 | 12 |
| Finished Unleaded Motor Gasoline | 116,098 | 1,284 | 3,080 | 504 | 7,223 | 128,189 | 383 |
| Finished Aviation Gasoline | 0 | 0 | 25 | 0 | 119 | 144 | (s) |
| Naphtha-Type Jet Fuel | 0 | 934 | 0 | 0 | 33 | 967 | 3 |
| Kerosene-Type Jet Fuel | 18,885 | 4,194 | 1,490 | 0 | 4,198 | 28,767 | 86 |
| Bonded Aircraft Fuel | 10,360 | 4,194 | 849 | 0 | 3,188 | 18,591 | 55 |
| Other | 8,525 | 0 | 641 | 0 | 1,010 | 10,176 | 30 |
| Kerosene | 3,053 | 0 | 1,542 | 0 | 0 | 4,595 | 14 |
| Distillate Fuel Oil | 86,269 | 1,814 | 602 | 832 | 979 | 90,496 | 270 |
| Bonded Ships Bunkers | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 86,269 | 1,814 | 602 | 832 | 979 | 90,496 | 270 |
| Residual Fuel Oil | 175,071 | 1,430 | 7,568 | 2 | 3,769 | 187,840 | 561 |
| Bonded Ships Bunkers | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 175,071 | 1,430 | 7,568 | 2 | 3,769 | 187,840 | 561 |
| Naphtha < 400 Deg. for Petro. Feed Use | 2,312 | 160 | 20,854 | 0 | 333 | 23,659 | 71 |
| Other Oils > 400 Deg. for Petro Feed Use | 228 | 0 | 797 | 0 | 524 | 1,549 | 5 |
| Special Naphthas | 413 | 579 | 2,697 | 1 | 91 | 3,781 | 11 |
| Lubricants | 2,856 | 149 | 220 | 0 | 116 | 3,341 | 10 |
| Waxes | 306 | 154 | 15 | 10 | 52 | 537 | 2 |
| Petroleum Coke | 37 | 0 | 164 | 0 | 193 | 394 | 1 |
| Asphalt and Road Oil | 9,254 | 372 | 392 | 19 | 448 | 10,485 | 31 |
| Miscellaneous Products | 458 | 39 | 59 | 0 | 0 | 556 | 2 |
| **Total Imports** | **876,613** | **348,948** | **1,054,207** | **26,651** | **80,431** | **2,386,850** | **7,125** |

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[1] Crude oil and unfinished oils are reported by the PAD District in which they are to be processed, all other products are reported by the PAD District of entry

[2] Includes crude oil imported for storage in the Strategic Petroleum Reserve

(s) = Less than 500 barrels

Note Total may not equal sum of components due to independent rounding

Sources and estimation procedures See Explanatory Notes 1 and 2

## Table 18. Imports of Crude Oil and Petroleum Products by Source and PAD District,[1] November 1988
(Thousand Barrels)

| Source | Crude Oil [2] | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Products [3] | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | All PAD Districts | | | | | | | | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Algeria | 2,648 | 1,398 | 379 | 0 | 0 | 0 | 0 | 716 | 2,533 | 0 | 1,980 | 7,006 | 9,654 | 322 |
| Iraq | 12,087 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12,087 | 403 |
| Kuwait | 5,569 | 0 | 518 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 518 | 6,087 | 203 |
| Saudi Arabia | 25,495 | 0 | 2,828 | 0 | 324 | 434 | 0 | 227 | 274 | 0 | 0 | 4,087 | 29,582 | 986 |
| Subtotal Arab OPEC | 45,799 | 1,398 | 3,725 | 0 | 324 | 434 | 0 | 943 | 2,807 | 0 | 1,980 | 11,611 | 57,410 | 1,914 |
| **Other OPEC** | | | | | | | | | | | | | | |
| Ecuador | 1,454 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 525 | 0 | 0 | 525 | 1,979 | 66 |
| Gabon | 674 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 674 | 22 |
| Indonesia | 6,809 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6,809 | 227 |
| Nigeria | 13,971 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 156 | 0 | 0 | 156 | 14,127 | 471 |
| Venezuela | 10,643 | 93 | 2,158 | 711 | 1,119 | 472 | 0 | 2,660 | 4,148 | 0 | 553 | 11,914 | 22,557 | 752 |
| Subtotal Other OPEC | 33,551 | 93 | 2,158 | 711 | 1,119 | 472 | 0 | 2,660 | 4,829 | 0 | 553 | 12,595 | 46,146 | 1,538 |
| **Other** | | | | | | | | | | | | | | |
| Angola | 5,716 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 630 | 0 | 0 | 630 | 6,346 | 212 |
| Argentina | 0 | 0 | 0 | 0 | 186 | 0 | 0 | 0 | 467 | 0 | 0 | 653 | 653 | 22 |
| Australia | 2,356 | 96 | 0 | 0 | 0 | 0 | 0 | 0 | 45 | 0 | 0 | 141 | 2,497 | 83 |
| Bahama Islands | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 247 | 552 | 0 | 0 | 799 | 799 | 27 |
| Belgium | 0 | 0 | 596 | 0 | 0 | 0 | 0 | 0 | 295 | 0 | 0 | 891 | 891 | 30 |
| Brazil | 0 | 0 | 0 | 26 | 1,743 | 0 | 0 | 0 | 304 | 17 | 0 | 2,090 | 2,090 | 70 |
| Cameroon | 1,256 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,256 | 42 |
| Canada | 19,117 | 5,106 | 151 | 60 | 1,436 | 267 | 35 | 1,915 | 1,074 | 166 | 235 | 10,445 | 29,562 | 985 |
| China, People's Republic of | 1,620 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,620 | 54 |
| Colombia | 3,384 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 961 | 0 | 0 | 961 | 4,345 | 145 |
| Egypt | 1,295 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,295 | 43 |
| France | 0 | 41 | 298 | 0 | 487 | 0 | 0 | 0 | 243 | 0 | 0 | 1,069 | 1,069 | 36 |
| Germany FD (W) | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 4 | 4 | (s) |
| Ghana | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 137 | 0 | 0 | 137 | 137 | 5 |
| Greece | 0 | 0 | 0 | 0 | 248 | 0 | 0 | 250 | 886 | 0 | 0 | 1,384 | 1,384 | 46 |
| India | 0 | 0 | 803 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 581 | 1,384 | 1,384 | 46 |
| Israel | 0 | 0 | 0 | 0 | 276 | 0 | 0 | 0 | 0 | 0 | 0 | 276 | 276 | 9 |
| Italy | 0 | 0 | 1,187 | 22 | 602 | 0 | 0 | 0 | 0 | 0 | 4 | 1,815 | 1,815 | 61 |
| Japan | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 66 | 66 | 66 | 2 |
| Korea, Republic of | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 42 | 43 | 43 | 1 |
| Malaysia | 2,266 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,266 | 76 |
| Malta | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | (s) | (s) |
| Mexico | 21,685 | 650 | 0 | 0 | 110 | 555 | 0 | 0 | 752 | 0 | 591 | 2,658 | 24,343 | 811 |
| Netherlands Antilles | 0 | 12 | 106 | 310 | 0 | 0 | 0 | 221 | 1,128 | 0 | 0 | 1,777 | 1,777 | 59 |
| Netherlands | 0 | 0 | 300 | 15 | 1,933 | 0 | 0 | 4 | 0 | 0 | 9 | 2,261 | 2,261 | 75 |
| Norway | 1,443 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,443 | 48 |
| Oman | 0 | 0 | 262 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 262 | 262 | 9 |
| Peru | 340 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,219 | 0 | 0 | 1,219 | 1,559 | 52 |
| Portugal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 198 | 0 | 0 | 198 | 198 | 7 |
| Puerto Rico | 0 | 0 | 36 | 0 | 0 | 0 | 0 | 0 | 377 | 0 | 416 | 829 | 829 | 28 |
| Romania | 0 | 0 | 0 | 528 | 601 | 0 | 0 | 258 | 0 | 0 | 0 | 1,387 | 1,387 | 46 |
| Singapore | 0 | 0 | 0 | 0 | 0 | 204 | 0 | 0 | 247 | 0 | 0 | 451 | 451 | 15 |
| South Africa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 17 | 17 | 1 |

See footnotes at end of table.

**Table 18. Imports of Crude Oil and Petroleum Products by Source and PAD District,[1] November 1988** (continued)
(Thousand Barrels)

| Source | Crude Oil [2] | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Products [3] | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **All PAD Districts (continued)** | | | | | | | | | | | | | | |
| **Other (continued)** | | | | | | | | | | | | | | |
| Spain | 0 | 31 | 361 | 0 | 2,283 | 0 | 0 | 0 | 0 | 0 | 171 | 2,846 | 2,846 | 95 |
| Sweden | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 970 | 0 | 0 | 970 | 970 | 32 |
| Syria | 357 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 158 | 0 | 0 | 158 | 515 | 17 |
| Trinidad and Tobago | 1,951 | 0 | 0 | 0 | 101 | 0 | 0 | 0 | 152 | 0 | 0 | 253 | 2,204 | 73 |
| Turkey | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 68 | 68 | 68 | 2 |
| United Kingdom | 4,531 | 307 | 464 | 0 | 734 | 0 | 0 | 186 | 1,102 | 0 | 25 | 2,818 | 7,349 | 245 |
| U.S.S.R | 0 | 0 | 800 | 0 | 0 | 0 | 0 | 323 | 966 | 0 | 0 | 2,089 | 2,089 | 70 |
| Virgin Islands | 0 | 0 | 1,393 | 215 | 1,357 | 431 | 494 | 2,233 | 2,443 | 0 | 0 | 8,566 | 8,566 | 286 |
| Yemen (Sanaa) | 2,575 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,575 | 86 |
| Zaire | 1,255 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,255 | 42 |
| Subtotal Other | 71,147 | 6,244 | 6,757 | 1,176 | 12,097 | 1,457 | 529 | 5,637 | 15,306 | 183 | 2,228 | 51,614 | 122,761 | 4,092 |
| **Total Imports** | **150,497** | **7,735** | **12,640** | **1,887** | **13,540** | **2,363** | **529** | **9,240** | **22,942** | **183** | **4,761** | **75,820** | **226,317** | **7,544** |
| **PAD District I** | | | | | | | | | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Algeria | 0 | 878 | 379 | 0 | 0 | 0 | 0 | 716 | 2,533 | 0 | 0 | 4,506 | 4,506 | 150 |
| Iraq | 594 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 594 | 20 |
| Saudi Arabia | 2,504 | 0 | 0 | 0 | 324 | 434 | 0 | 227 | 274 | 0 | 0 | 1,259 | 3,763 | 125 |
| Subtotal Arab OPEC | 3,098 | 878 | 379 | 0 | 324 | 434 | 0 | 943 | 2,807 | 0 | 0 | 5,765 | 8,863 | 295 |
| **Other OPEC** | | | | | | | | | | | | | | |
| Ecuador | 386 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 525 | 0 | 0 | 525 | 911 | 30 |
| Indonesia | 787 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 787 | 26 |
| Nigeria | 6,400 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 156 | 0 | 0 | 156 | 6,556 | 219 |
| Venezuela | 1,554 | 93 | 537 | 477 | 1,119 | 472 | 0 | 2,660 | 4,148 | 0 | 553 | 10,059 | 11,613 | 387 |
| Subtotal Other OPEC | 9,127 | 93 | 537 | 477 | 1,119 | 472 | 0 | 2,660 | 4,829 | 0 | 553 | 10,740 | 19,867 | 662 |
| **Other** | | | | | | | | | | | | | | |
| Angola | 3,764 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 630 | 0 | 0 | 630 | 4,394 | 146 |
| Argentina | 0 | 0 | 0 | 0 | 186 | 0 | 0 | 0 | 467 | 0 | 0 | 653 | 653 | 22 |
| Bahama Islands | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 247 | 552 | 0 | 0 | 799 | 799 | 27 |
| Belgium | 0 | 0 | 259 | 0 | 0 | 0 | 0 | 0 | 295 | 0 | 0 | 554 | 554 | 18 |
| Brazil | 0 | 0 | 0 | 26 | 1,743 | 0 | 0 | 0 | 304 | 0 | 0 | 2,073 | 2,073 | 69 |
| Cameroon | 522 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 522 | 17 |
| Canada | 1,897 | 601 | 3 | 0 | 1,017 | 184 | 35 | 1,548 | 786 | 4 | 85 | 4,263 | 6,160 | 205 |
| Colombia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 961 | 0 | 0 | 961 | 961 | 32 |
| Egypt | 1,295 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,295 | 43 |
| France | 0 | 0 | 0 | 0 | 487 | 0 | 0 | 0 | 243 | 0 | 0 | 730 | 730 | 24 |
| Germany FD (W) | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 4 | 4 | (s) |
| Ghana | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 137 | 0 | 0 | 137 | 137 | 5 |
| Greece | 0 | 0 | 0 | 0 | 248 | 0 | 0 | 250 | 886 | 0 | 0 | 1,384 | 1,384 | 46 |
| Israel | 0 | 0 | 0 | 0 | 276 | 0 | 0 | 0 | 0 | 0 | 0 | 276 | 276 | 9 |
| Italy | 0 | 0 | 427 | 22 | 602 | 0 | 0 | 0 | 0 | 0 | 4 | 1,055 | 1,055 | 35 |
| Japan | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 | 4 | (s) |
| Mexico | 3,593 | 0 | 0 | 0 | 0 | 201 | 0 | 0 | 299 | 0 | 494 | 994 | 4,587 | 153 |
| Netherlands Antilles | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 221 | 1,128 | 0 | 0 | 1,349 | 1,349 | 45 |

See footnotes at end of table

## Table 18. Imports of Crude Oil and Petroleum Products by Source and PAD District,[1] November 1988 (continued)
(Thousand Barrels)

| Source | Crude Oil [2] | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Products [3] | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | PAD District I (continued) | | | | | | | |
| **Other (continued)** | | | | | | | | | | | | | | |
| Netherlands | 0 | 0 | 300 | 15 | 1,933 | 0 | 0 | 0 | 0 | 0 | 9 | 2,257 | 2,257 | 75 |
| Norway | 1,443 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,443 | 48 |
| Peru | 340 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,219 | 0 | 0 | 1,219 | 1,559 | 52 |
| Portugal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 198 | 0 | 0 | 198 | 198 | 7 |
| Puerto Rico | 0 | 0 | 36 | 0 | 0 | 0 | 0 | 0 | 377 | 0 | 375 | 788 | 788 | 26 |
| Romania | 0 | 0 | 0 | 528 | 601 | 0 | 0 | 258 | 0 | 0 | 0 | 1,387 | 1,387 | 46 |
| South Africa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 9 | 9 | (s) |
| Spain | 0 | 0 | 139 | 0 | 2,283 | 0 | 0 | 0 | 0 | 0 | 171 | 2,593 | 2,593 | 86 |
| Sweden | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 970 | 0 | 0 | 970 | 970 | 32 |
| Syria | 357 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 158 | 0 | 0 | 158 | 515 | 17 |
| Trinidad and Tobago | 465 | 0 | 0 | 0 | 101 | 0 | 0 | 0 | 152 | 0 | 0 | 253 | 718 | 24 |
| United Kingdom | 2,047 | 0 | 256 | 0 | 734 | 0 | 0 | 186 | 1,102 | 0 | 0 | 2,278 | 4,325 | 144 |
| U.S.S.R. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 323 | 966 | 0 | 0 | 1,289 | 1,289 | 43 |
| Virgin Islands | 0 | 0 | 1,393 | 215 | 1,357 | 431 | 225 | 2,233 | 2,443 | 0 | 0 | 8,297 | 8,297 | 277 |
| Zaire | 300 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 300 | 10 |
| Subtotal Other | 16,023 | 601 | 2,813 | 806 | 11,568 | 816 | 260 | 5,266 | 14,273 | 4 | 1,154 | 37,561 | 53,584 | 1,786 |
| **Total Imports** | **28,248** | **1,573** | **3,729** | **1,283** | **13,011** | **1,722** | **260** | **8,869** | **21,909** | **4** | **1,707** | **54,066** | **82,314** | **2,744** |
| | | | | | | | PAD District II | | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Algeria | 303 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 303 | 10 |
| Iraq | 2,502 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,502 | 83 |
| Saudi Arabia | 4,833 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,833 | 161 |
| Subtotal Arab OPEC | 7,638 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7,638 | 255 |
| **Other OPEC** | | | | | | | | | | | | | | |
| Ecuador | 395 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 395 | 13 |
| Nigeria | 2,463 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,463 | 82 |
| Subtotal Other OPEC | 2,858 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,858 | 95 |
| **Other** | | | | | | | | | | | | | | |
| Canada | 14,088 | 3,785 | 0 | 20 | 176 | 77 | 0 | 176 | 288 | 68 | 96 | 4,686 | 18,774 | 626 |
| Mexico | 1,409 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,409 | 47 |
| Netherlands | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 4 | 4 | (s) |
| South Africa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 7 | 7 | (s) |
| United Kingdom | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | (s) |
| Yemen (Sanaa) | 2,076 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,076 | 69 |
| Subtotal Other | 17,573 | 3,787 | 0 | 20 | 176 | 77 | 0 | 180 | 288 | 68 | 103 | 4,699 | 22,272 | 742 |
| **Total Imports** | **28,069** | **3,787** | **0** | **20** | **176** | **77** | **0** | **180** | **288** | **68** | **103** | **4,699** | **32,768** | **1,092** |

See footnotes at end of table.

**Table 18. Imports of Crude Oil and Petroleum Products by Source and PAD District,[1] November 1988** (continued)
(Thousand Barrels)

| Source | Crude Oil [2] | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Products [3] | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **PAD District III** | | | | | | | | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Algeria | 2,345 | 520 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,980 | 2,500 | 4,845 | 161 |
| Iraq | 8,991 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8,991 | 300 |
| Kuwait | 5,569 | 0 | 518 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 518 | 6,087 | 203 |
| Saudi Arabia | 18,158 | 0 | 2,828 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,828 | 20,986 | 700 |
| Subtotal Arab OPEC | 35,063 | 520 | 3,346 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,980 | 5,846 | 40,909 | 1,364 |
| **Other OPEC** | | | | | | | | | | | | | | |
| Ecuador | 382 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 382 | 13 |
| Gabon | 674 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 674 | 22 |
| Indonesia | 987 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 987 | 33 |
| Nigeria | 5,108 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5,108 | 170 |
| Venezuela | 9,089 | 0 | 1,621 | 234 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,855 | 10,944 | 365 |
| Subtotal Other OPEC | 16,240 | 0 | 1,621 | 234 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,855 | 18,095 | 603 |
| **Other** | | | | | | | | | | | | | | |
| Angola | 1,952 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,952 | 65 |
| Australia | 1,860 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,860 | 62 |
| Belgium | 0 | 0 | 337 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 337 | 337 | 11 |
| Brazil | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 0 | 17 | 17 | 1 |
| Cameroon | 734 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 734 | 24 |
| Canada | 0 | 0 | 148 | 40 | 0 | 0 | 0 | 0 | 0 | 89 | 0 | 277 | 277 | 9 |
| China, People's Republic of | 1,620 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,620 | 54 |
| Colombia | 3,384 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,384 | 113 |
| France | 0 | 41 | 298 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 339 | 339 | 11 |
| India | 0 | 0 | 803 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 581 | 1,384 | 1,384 | 46 |
| Italy | 0 | 0 | 760 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 760 | 760 | 25 |
| Japan | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32 | 32 | 32 | 1 |
| Malaysia | 1,132 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,132 | 38 |
| Mexico | 16,683 | 650 | 0 | 0 | 110 | 265 | 0 | 0 | 453 | 0 | 92 | 1,570 | 18,253 | 608 |
| Netherlands Antilles | 0 | 12 | 106 | 310 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 428 | 428 | 14 |
| Oman | 0 | 0 | 262 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 262 | 262 | 9 |
| Puerto Rico | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 41 | 41 | 41 | 1 |
| South Africa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | (s) |
| Spain | 0 | 31 | 222 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 253 | 253 | 8 |
| Trinidad and Tobago | 1,486 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,486 | 50 |
| Turkey | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 68 | 68 | 68 | 2 |
| United Kingdom | 2,484 | 86 | 208 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 319 | 2,803 | 93 |
| U.S.S.R. | 0 | 0 | 800 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 800 | 800 | 27 |
| Virgin Islands | 0 | 0 | 0 | 0 | 0 | 0 | 269 | 0 | 0 | 0 | 0 | 269 | 269 | 9 |
| Yemen (Sanaa) | 499 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 499 | 17 |
| Zaire | 955 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 955 | 32 |
| Subtotal Other | 32,789 | 819 | 3,944 | 350 | 110 | 265 | 269 | 0 | 453 | 106 | 840 | 7,157 | 39,946 | 1,332 |
| **Total Imports** | **84,092** | **1,339** | **8,911** | **584** | **110** | **265** | **269** | **0** | **453** | **106** | **2,820** | **14,858** | **98,950** | **3,298** |

See footnotes at end of table

## Table 18. Imports of Crude Oil and Petroleum Products by Source and PAD District,[1] November 1988 (continued)
(Thousand Barrels)

| Source | Crude Oil [2] | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Products [3] | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | PAD District IV | | | | | | | |
| **Other** | | | | | | | | | | | | | | |
| Canada | 2,395 | 380 | 0 | 0 | 36 | 0 | 0 | 110 | 0 | 0 | 31 | 557 | 2,952 | 98 |
| Malta | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | (s) | (s) |
| Subtotal Other | 2,395 | 380 | 0 | 0 | 36 | 0 | 0 | 110 | 0 | 0 | 31 | 557 | 2,952 | 98 |
| **Total Imports** | **2,395** | **380** | **0** | **0** | **36** | **0** | **0** | **110** | **0** | **0** | **31** | **557** | **2,952** | **98** |
| | | | | | | | PAD District V | | | | | | | |
| **Other OPEC** | | | | | | | | | | | | | | |
| Ecuador | 291 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 291 | 10 |
| Indonesia | 5,035 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5,035 | 168 |
| Subtotal Other OPEC | 5,326 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5,326 | 178 |
| **Other** | | | | | | | | | | | | | | |
| Australia | 496 | 96 | 0 | 0 | 0 | 0 | 0 | 0 | 45 | 0 | 0 | 141 | 637 | 21 |
| Canada | 737 | 340 | 0 | 0 | 207 | 6 | 0 | 81 | 0 | 5 | 23 | 662 | 1,399 | 47 |
| Japan | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 30 | 30 | 1 |
| Korea, Republic of | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 42 | 43 | 43 | 1 |
| Malaysia | 1,134 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,134 | 38 |
| Mexico | 0 | 0 | 0 | 0 | 0 | 89 | 0 | 0 | 0 | 0 | 5 | 94 | 94 | 3 |
| Singapore | 0 | 0 | 0 | 0 | 0 | 204 | 0 | 0 | 247 | 0 | 0 | 451 | 451 | 15 |
| United Kingdom | 0 | 218 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 218 | 218 | 7 |
| Subtotal Other | 2,367 | 655 | 0 | 0 | 207 | 299 | 0 | 81 | 292 | 5 | 100 | 1,639 | 4,006 | 134 |
| **Total Imports** | **7,693** | **655** | **0** | **0** | **207** | **299** | **0** | **81** | **292** | **5** | **100** | **1,639** | **9,332** | **311** |

[1] Crude Oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

[2] Includes crude oil imported for storage in the Strategic Petroleum Reserve.

[3] Includes aviation gasoline, aviation gasoline blending components, waxes, asphalt, lubricants, pentanes plus, naphthas less than 400 degrees F endpoint, other oils equal to or greater than 400 degrees F endpoint, petroleum coke and miscellaneous products.

[4] Beginning in January 1988, imports of crude oil and petroleum products from the Neutral Zone are shown separately. Prior to January 1988, these data were included with imports from Saudi Arabia and Kuwait.

(s) = Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 19. Year-to-Date Imports of Crude Oil and Petroleum Products by Source and PAD District,[1] January - November 1988

(Thousand Barrels)

| Source | Crude Oil [2] | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid Fuel Oil | Special Naphthas | Other Products [3] | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | All PAD Districts | | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Algeria | 39,405 | 8,460 | 8,801 | 0 | 0 | 314 | 0 | 4,856 | 19,645 | 0 | 16,467 | 58,543 | 97,948 | 292 |
| Iraq | 114,418 | 0 | 930 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 930 | 115,348 | 344 |
| Kuwait | 25,537 | 790 | 3,155 | 0 | 0 | 45 | 0 | 0 | 0 | 0 | 0 | 3,990 | 29,527 | 88 |
| Neutral Zone[4] | 3,274 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,274 | 10 |
| Saudi Arabia | 291,738 | 7,221 | 32,219 | 335 | 7,739 | 3,374 | 325 | 4,707 | 274 | 0 | 660 | 56,854 | 348,592 | 1,041 |
| United Arab Emirates | 7,433 | 482 | 573 | 0 | 0 | 592 | 0 | 342 | 0 | 0 | 213 | 2,202 | 9,635 | 29 |
| Subtotal Arab OPEC | 481,805 | 16,952 | 45,678 | 335 | 7,739 | 4,325 | 325 | 9,905 | 19,919 | 0 | 17,340 | 122,518 | 604,323 | 1,804 |
| **Other OPEC** | | | | | | | | | | | | | | |
| Ecuador | 10,436 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,711 | 0 | 0 | 4,711 | 15,147 | 45 |
| Gabon | 5,664 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 323 | 0 | 0 | 323 | 5,987 | 18 |
| Indonesia | 60,180 | 0 | 1,176 | 0 | 0 | 0 | 0 | 0 | 2,078 | 0 | 524 | 3,778 | 63,958 | 191 |
| Iran | [5] 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | [5] 25 | [5] (s) |
| Nigeria | 183,246 | 0 | 603 | 0 | 0 | 0 | 0 | 256 | 3,054 | 0 | 0 | 3,913 | 187,159 | 559 |
| Venezuela | 150,588 | 1,990 | 18,301 | 2,053 | 15,785 | 8,505 | 0 | 28,602 | 31,742 | 3 | 6,870 | 113,851 | 264,439 | 789 |
| Subtotal Other OPEC | 410,139 | 1,990 | 20,080 | 2,053 | 15,785 | 8,505 | 0 | 28,858 | 41,908 | 3 | 7,394 | 126,576 | 536,715 | 1,602 |
| **Other** | | | | | | | | | | | | | | |
| Angola | 66,163 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,819 | 0 | 0 | 2,819 | 68,982 | 206 |
| Argentina | 967 | 0 | 0 | 18 | 601 | 0 | 0 | 0 | 1,637 | 314 | 17 | 2,587 | 3,554 | 11 |
| Australia | 16,871 | 96 | 0 | 0 | 0 | 0 | 0 | 0 | 913 | 0 | 131 | 1,140 | 18,011 | 54 |
| Bahama Islands | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 255 | 8,712 | 0 | 0 | 8,967 | 8,967 | 27 |
| Bahrain | 0 | 0 | 275 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 275 | 275 | 1 |
| Belgium | 0 | 0 | 4,014 | 482 | 1,368 | 0 | 0 | 0 | 1,599 | 0 | 15 | 7,478 | 7,478 | 22 |
| Benin | 1,326 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,326 | 4 |
| Bermuda | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 8 | (s) |
| Brazil | 0 | 548 | 15 | 77 | 25,012 | 0 | 219 | 1,281 | 5,526 | 87 | 67 | 32,832 | 32,832 | 98 |
| Brunei | 338 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 338 | 1 |
| Cameroon | 10,813 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,234 | 0 | 0 | 2,234 | 13,047 | 39 |
| Canada | 224,731 | 41,224 | 2,298 | 96 | 15,710 | 3,260 | 264 | 21,531 | 12,211 | 1,341 | 4,151 | 102,086 | 326,817 | 976 |
| China, People's Republic of | 27,847 | 1 | 0 | 307 | 1 162 | 0 | 0 | 0 | 0 | 0 | 260 | 1,730 | 29 577 | 88 |
| China, Taiwan | 0 | 45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 58 | 103 | 103 | (s) |
| Colombia | 33,394 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8,946 | 0 | 0 | 8,946 | 42,340 | 126 |
| Congo | 10,747 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 933 | 0 | 0 | 933 | 11,680 | 35 |
| Egypt | 8,663 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 8 | 8,671 | 26 |
| Finland | 0 | 0 | 0 | 0 | 292 | 0 | 0 | 0 | 0 | 0 | 0 | 292 | 292 | 1 |
| France | 0 | 77 | 639 | 105 | 2,726 | 0 | 0 | 0 | 1,659 | 0 | 177 | 5,383 | 5 383 | 16 |
| Germany DR (E) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 944 | 0 | 0 | 0 | 944 | 944 | 3 |
| Germany FD (W) | 0 | 14 | 359 | 0 | 310 | 0 | 0 | 0 | 1,079 | 26 | 57 | 1,845 | 1,845 | 6 |
| Ghana | 0 | 0 | 151 | 0 | 0 | 0 | 0 | 0 | 435 | 0 | 0 | 586 | 586 | 2 |
| Greece | 0 | 0 | 239 | 0 | 2,435 | 251 | 0 | 384 | 3,153 | 0 | 0 | 6 462 | 6,462 | 19 |
| Guatemala | 859 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 859 | 3 |
| Hong Kong | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | (s) | (s) |
| Hungary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 5 | (s) |
| India | 100 | 0 | 6,394 | 0 | 0 | 0 | 0 | 0 | 0 | 1,548 | 1,729 | 9 671 | 9 771 | 29 |
| Ireland | 0 | 0 | 174 | 0 | 0 | 0 | 0 | 0 | 203 | 0 | 0 | 377 | 377 | 1 |
| Israel | 0 | 0 | 0 | 0 | 1,360 | 0 | 0 | 0 | 0 | 36 | 0 | 1,396 | 1 396 | 4 |
| Italy | 1,883 | 1 | 6,586 | 55 | 9,020 | 587 | 0 | 981 | 1,451 | 98 | 114 | 18,892 | 20 775 | 62 |
| Japan | 0 | 21 | 0 | 0 | 0 | 0 | 0 | 57 | 0 | 44 | 475 | 597 | 597 | 2 |

See footnotes at end of table

## Table 19. Year-to-Date Imports of Crude Oil and Petroleum Products by Source and PAD District,[1] January - November 1988 (continued)
(Thousand Barrels)

| Source | Crude Oil [2] | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Products [3] | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **All PAD Districts (continued)** | | | | | | | | | | | | | |
| **Other (continued)** | | | | | | | | | | | | | | |
| Korea, Republic of | 0 | 11 | 0 | 0 | 0 | 258 | 0 | 0 | 0 | 0 | 189 | 458 | 458 | 1 |
| Liberia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 210 | 0 | 0 | 0 | 210 | 210 | 1 |
| Malaysia | 4,831 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,831 | 14 |
| Malta | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | (s) | (s) |
| Mauritania | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 245 | 0 | 0 | 245 | 245 | 1 |
| Mexico | 225,548 | 8,280 | 0 | 440 | 1,111 | 4,493 | 0 | 1,447 | 4,963 | 0 | 2,828 | 23,563 | 249,111 | 744 |
| Netherlands Antilles | 0 | 12 | 211 | 310 | 981 | 0 | 0 | 1,113 | 7,086 | 0 | 143 | 9,856 | 9,856 | 29 |
| Netherlands | 0 | 14 | 1,839 | 81 | 11,973 | 0 | 151 | 1,186 | 1,841 | 146 | 354 | 17,585 | 17,585 | 52 |
| Norway | 20,044 | 0 | 488 | 0 | 0 | 0 | 0 | 0 | 273 | 0 | 569 | 1,330 | 21,374 | 64 |
| Oman | 2,439 | 0 | 1,248 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,248 | 3,687 | 11 |
| Panama | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 11 | 11 | (s) |
| Peru | 1,849 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8,946 | 0 | 0 | 8,946 | 10,795 | 32 |
| Philippines | 0 | 74 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 74 | 74 | (s) |
| Portugal | 0 | 0 | 0 | 22 | 221 | 0 | 0 | 0 | 609 | 28 | 45 | 925 | 925 | 3 |
| Puerto Rico | 0 | 0 | 1,225 | 0 | 0 | 0 | 0 | 0 | 377 | 0 | 5,587 | 7,189 | 7,189 | 21 |
| Romania | 0 | 0 | 0 | 10,995 | 4,926 | 0 | 0 | 1,541 | 1,140 | 0 | 0 | 18,602 | 18,602 | 56 |
| Singapore | 0 | 0 | 601 | 13 | 0 | 1,154 | 0 | 0 | 2,705 | 0 | 0 | 4,473 | 4,473 | 13 |
| South Africa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 210 | 0 | 120 | 330 | 330 | 1 |
| Spain | 0 | 71 | 3,383 | 142 | 11,036 | 1,771 | 0 | 219 | 2,696 | 0 | 1,924 | 21,242 | 21,242 | 63 |
| Sweden | 0 | 2 | 146 | 0 | 257 | 0 | 0 | 372 | 2,445 | 0 | 250 | 3,472 | 3,472 | 10 |
| Switzerland | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | (s) |
| Syria | 2,402 | 0 | 538 | 0 | 0 | 0 | 0 | 0 | 352 | 0 | 0 | 890 | 3,292 | 10 |
| Thailand | 1,431 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,431 | 4 |
| Trinidad and Tobago | 23,539 | 0 | 0 | 0 | 498 | 633 | 115 | 712 | 6,201 | 0 | 3 | 8,162 | 31,701 | 95 |
| Tunisia | 0 | 0 | 220 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 220 | 220 | 1 |
| Turkey | 0 | 0 | 1,878 | 0 | 0 | 0 | 0 | 0 | 230 | 34 | 305 | 2,447 | 2,447 | 7 |
| United Kingdom | 86,715 | 316 | 2,001 | 0 | 7,287 | 244 | 0 | 1,424 | 6,340 | 68 | 231 | 17,911 | 104,626 | 312 |
| U.S.S.R. | 0 | 0 | 2,460 | 0 | 395 | 0 | 0 | 4,074 | 1,710 | 8 | 0 | 8,647 | 8,647 | 26 |
| Virgin Islands | 0 | 0 | 17,017 | 3,689 | 9,913 | 4,253 | 3,521 | 14,002 | 24,124 | 0 | 0 | 76,519 | 76,519 | 228 |
| Yemen (Sanaa) | 9,191 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9,191 | 27 |
| Zaire | 9,970 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9,970 | 30 |
| Subtotal Other | 792,661 | 50,807 | 54,407 | 16,832 | 108,594 | 16,904 | 4,270 | 51,733 | 126,013 | 3,778 | 19,814 | 453,152 | 1,245,813 | 3,719 |
| **Total Imports** | **1,684,605** | **69,749** | **120,165** | **19,220** | **132,118** | **29,734** | **4,595** | **90,496** | **187,840** | **3,781** | **44,548** | **702,245** | **2,386,850** | **7,125** |
| | **PAD District I** | | | | | | | | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Algeria | 0 | 3,972 | 7,735 | 0 | 0 | 314 | 0 | 4,856 | 17,463 | 0 | 0 | 34,339 | 34,339 | 103 |
| Iraq | 8,103 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8,103 | 24 |
| Neutral Zone[4] | 650 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 650 | 2 |
| Saudi Arabia | 36,647 | 2,239 | 355 | 335 | 5,997 | 2,595 | 325 | 4,707 | 274 | 0 | 0 | 16,827 | 53,474 | 160 |
| United Arab Emirates | 1,427 | 0 | 0 | 0 | 0 | 0 | 0 | 342 | 0 | 0 | 0 | 342 | 1,769 | 5 |
| Subtotal Arab OPEC | 46,827 | 6,211 | 8,090 | 335 | 5,997 | 2,909 | 325 | 9,905 | 17,737 | 0 | 0 | 51,508 | 98,335 | 294 |

See footnotes at end of table.

## Table 19. Year-to-Date Imports of Crude Oil and Petroleum Products by Source and PAD District,[1] January - November 1988 (continued)

(Thousand Barrels)

| Source | Crude Oil [2] | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Products [3] | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PAD District I (continued)** | | | | | | | | | | | | | | |
| **Other OPEC** | | | | | | | | | | | | | | |
| Ecuador | 6,047 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,711 | 0 | 0 | 4,711 | 10,758 | 32 |
| Gabon | 2,551 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 323 | 0 | 0 | 323 | 2,874 | 9 |
| Indonesia | 2,751 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,575 | 0 | 0 | 1,575 | 4,326 | 13 |
| Nigeria | 100,705 | 0 | 0 | 0 | 0 | 0 | 0 | 256 | 3,054 | 0 | 0 | 3,310 | 104,015 | 310 |
| Venezuela | 39,466 | 910 | 3,997 | 874 | 13,718 | 6,508 | 0 | 28,600 | 31,222 | 3 | 6,252 | 92,083 | 131,549 | 393 |
| Subtotal Other OPEC | 151,520 | 910 | 3,997 | 874 | 13,718 | 6,508 | 0 | 28,856 | 40,885 | 3 | 6,252 | 102,002 | 253,522 | 757 |
| **Other** | | | | | | | | | | | | | | |
| Angola | 33,999 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,819 | 0 | 0 | 2,819 | 36,818 | 110 |
| Argentina | 967 | 0 | 0 | 18 | 601 | 0 | 0 | 0 | 1,637 | 35 | 0 | 2,291 | 3,258 | 10 |
| Australia | 1,298 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 182 | 0 | 80 | 262 | 1,560 | 5 |
| Bahama Islands | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 255 | 8,485 | 0 | 0 | 8,740 | 8,740 | 26 |
| Belgium | 0 | 0 | 1,619 | 274 | 1,368 | 0 | 0 | 0 | 1,599 | 0 | 0 | 4,860 | 4,860 | 15 |
| Benin | 1,013 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,013 | 3 |
| Brazil | 0 | 0 | 15 | 26 | 23,243 | 0 | 219 | 1,281 | 5,526 | 17 | 60 | 30,387 | 30,387 | 91 |
| Cameroon | 6,653 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,234 | 0 | 0 | 2,234 | 8,887 | 27 |
| Canada | 22,043 | 4,595 | 588 | 15 | 12,297 | 1,944 | 264 | 17,467 | 9,850 | 103 | 1,883 | 49,006 | 71,049 | 212 |
| China, People's Republic of | 9,975 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 114 | 114 | 10,089 | 30 |
| China, Taiwan | 0 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 30 | (s) |
| Colombia | 6,895 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8,946 | 0 | 0 | 8,946 | 15,841 | 47 |
| Congo | 2,353 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 933 | 0 | 0 | 933 | 3,286 | 10 |
| Egypt | 7,036 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 | 7,040 | 21 |
| Finland | 0 | 0 | 0 | 0 | 292 | 0 | 0 | 0 | 0 | 0 | 0 | 292 | 292 | 1 |
| France | 0 | 2 | 0 | 105 | 2,474 | 0 | 0 | 0 | 1,659 | 0 | 54 | 4,294 | 4,294 | 13 |
| Germany DR (E) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 944 | 0 | 0 | 0 | 944 | 944 | 3 |
| Germany FD (W) | 0 | 12 | 0 | 0 | 310 | 0 | 0 | 0 | 827 | 22 | 23 | 1,194 | 1,194 | 4 |
| Ghana | 0 | 0 | 133 | 0 | 0 | 0 | 0 | 0 | 435 | 0 | 0 | 568 | 568 | 2 |
| Greece | 0 | 0 | 0 | 0 | 2,435 | 251 | 0 | 384 | 3,153 | 0 | 0 | 6,223 | 6,223 | 19 |
| Hungary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 5 | (s) |
| India | 0 | 0 | 569 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 569 | 569 | 2 |
| Ireland | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 203 | 0 | 0 | 203 | 203 | 1 |
| Israel | 0 | 0 | 0 | 0 | 1,360 | 0 | 0 | 0 | 0 | 0 | 0 | 1,360 | 1,360 | 4 |
| Italy | 1,532 | 1 | 3,458 | 55 | 9,020 | 37 | 0 | 981 | 1,451 | 18 | 24 | 15,045 | 16,577 | 49 |
| Japan | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 81 | 90 | 90 | (s) |
| Korea, Republic of | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 6 | (s) |
| Liberia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 210 | 0 | 0 | 0 | 210 | 210 | 1 |
| Mauritania | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 245 | 0 | 0 | 245 | 245 | 1 |
| Mexico | 27,179 | 0 | 0 | 0 | 309 | 1,236 | 0 | 1,347 | 2,606 | 0 | 2,330 | 7,828 | 35,007 | 104 |
| Netherlands Antilles | 0 | 0 | 0 | 0 | 464 | 0 | 0 | 1,113 | 7,086 | 0 | 84 | 8,747 | 8,747 | 26 |
| Netherlands | 0 | 6 | 1,681 | 81 | 11,265 | 0 | 151 | 1,182 | 1,841 | 131 | 54 | 16,392 | 16,392 | 49 |
| Norway | 12,487 | 0 | 213 | 0 | 0 | 0 | 0 | 0 | 273 | 0 | 569 | 1,055 | 13,542 | 40 |
| Oman | 839 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 839 | 3 |
| Panama | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 10 | 10 | (s) |
| Peru | 720 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8,946 | 0 | 0 | 8,946 | 9,666 | 29 |
| Portugal | 0 | 0 | 0 | 0 | 221 | 0 | 0 | 0 | 609 | 0 | 0 | 830 | 830 | 2 |
| Puerto Rico | 0 | 0 | 1,122 | 0 | 0 | 0 | 0 | 0 | 377 | 0 | 4,783 | 6,282 | 6,282 | 19 |
| Romania | 0 | 0 | 0 | 10,995 | 4,926 | 0 | 0 | 1,541 | 1,140 | 0 | 0 | 18,602 | 18,602 | 56 |
| Singapore | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 402 | 0 | 0 | 402 | 402 | 1 |

See footnotes at end of table

## Table 19. Year-to-Date Imports of Crude Oil and Petroleum Products by Source and PAD District,[1] January - November 1988 (continued)
(Thousand Barrels)

| Source | Crude Oil [2] | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Products [3] | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | **PAD District I (continued)** | | | | | | | |
| **Other (continued)** | | | | | | | | | | | | | | |
| South Africa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 210 | 0 | 63 | 273 | 273 | 1 |
| Spain | 0 | 2 | 1,141 | 142 | 11,035 | 1,433 | 0 | 219 | 2,695 | 0 | 1,805 | 18,472 | 18,472 | 55 |
| Sweden | 0 | 1 | 146 | 0 | 257 | 0 | 0 | 372 | 2,445 | 0 | 0 | 3,221 | 3,221 | 10 |
| Switzerland | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | (s) |
| Syria | 2,402 | 0 | 538 | 0 | 0 | 0 | 0 | 0 | 352 | 0 | 0 | 890 | 3,292 | 10 |
| Trinidad and Tobago | 5,363 | 0 | 0 | 0 | 498 | 300 | 115 | 712 | 6,201 | 0 | 3 | 7,829 | 13,192 | 39 |
| Turkey | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 230 | 0 | 0 | 230 | 230 | 1 |
| United Kingdom | 37,713 | 4 | 260 | 0 | 7,287 | 244 | 0 | 1,424 | 5,725 | 68 | 77 | 15,089 | 52,802 | 158 |
| U.S.S.R. | 0 | 0 | 0 | 0 | 395 | 0 | 0 | 4,074 | 993 | 8 | 0 | 5,470 | 5,470 | 16 |
| Virgin Islands | 0 | 0 | 16,601 | 3,689 | 9,913 | 4,024 | 1,979 | 14,002 | 24,124 | 0 | 0 | 74,332 | 74,332 | 222 |
| Yemen (Sanaa) | 2,713 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,713 | 8 |
| Zaire | 4,800 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,800 | 14 |
| Subtotal Other | 187,980 | 4,660 | 28,084 | 15,400 | 99,970 | 9,469 | 2,728 | 47,508 | 116,449 | 410 | 12,098 | 336,776 | 524,756 | 1,566 |
| **Total Imports** | **386,327** | **11,780** | **40,171** | **16,609** | **119,685** | **18,885** | **3,053** | **86,269** | **175,071** | **413** | **18,350** | **490,286** | **876,613** | **2,617** |
| | | | | | | | **PAD District II** | | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Algeria | 4,711 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,711 | 14 |
| Iraq | 12,564 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12,564 | 38 |
| Kuwait | 656 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 656 | 2 |
| Saudi Arabia | 47,904 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 47,904 | 143 |
| United Arab Emirates | 177 | 0 | 0 | 0 | 0 | 592 | 0 | 0 | 0 | 0 | 0 | 592 | 769 | 2 |
| Subtotal Arab OPEC | 66,012 | 0 | 0 | 0 | 0 | 592 | 0 | 0 | 0 | 0 | 0 | 592 | 66,604 | 199 |
| **Other OPEC** | | | | | | | | | | | | | | |
| Ecuador | 1,565 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,565 | 5 |
| Indonesia | 659 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 659 | 2 |
| Nigeria | 28,431 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28,431 | 85 |
| Venezuela | 1,813 | 0 | 634 | 0 | 0 | 1,273 | 0 | 0 | 0 | 0 | 0 | 1,907 | 3,720 | 11 |
| Subtotal Other OPEC | 32,468 | 0 | 634 | 0 | 0 | 1,273 | 0 | 0 | 0 | 0 | 0 | 1,907 | 34,375 | 103 |
| **Other** | | | | | | | | | | | | | | |
| Cameroon | 417 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 417 | 1 |
| Canada | 173,059 | 29,774 | 0 | 41 | 1,311 | 934 | 0 | 1,810 | 1,430 | 579 | 1,077 | 36,956 | 210,015 | 627 |
| Colombia | 922 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 922 | 3 |
| Congo | 480 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 480 | 1 |
| Egypt | 935 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 935 | 3 |
| France | 0 | 34 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 34 | 34 | (s) |
| Italy | 0 | 0 | 0 | 0 | 0 | 132 | 0 | 0 | 0 | 0 | 0 | 132 | 132 | (s) |
| Japan | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | (s) | (s) |
| Mexico | 17,997 | 0 | 0 | 0 | 0 | 1,613 | 0 | 0 | 0 | 0 | 0 | 1,613 | 19,610 | 59 |
| Netherlands | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 4 | 4 | (s) |
| Norway | 447 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 447 | 1 |
| Peru | 1,129 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,129 | 3 |
| Puerto Rico | 0 | 0 | 103 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 103 | 103 | (s) |
| South Africa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 48 | 48 | 48 | (s) |

See footnotes at end of table.

## Table 19. Year-to-Date Imports of Crude Oil and Petroleum Products by Source and PAD District,[1] January - November 1988 (continued)

(Thousand Barrels)

| Source | Crude Oil [2] | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Products [3] | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PAD District II (continued)** | | | | | | | | | | | | | | |
| **Other (continued)** | | | | | | | | | | | | | | |
| Spain | 0 | 0 | 0 | 0 | 0 | 251 | 0 | 0 | 0 | 0 | 119 | 370 | 370 | 1 |
| Sweden | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | (s) |
| Trinidad and Tobago | 176 | 0 | 0 | 0 | 0 | 333 | 0 | 0 | 0 | 0 | 0 | 333 | 509 | 2 |
| United Kingdom | 7,612 | 8 | 368 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 376 | 7,988 | 24 |
| Yemen (Sanaa) | 4,178 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,178 | 12 |
| Zaire | 646 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 646 | 2 |
| Subtotal Other | 207,998 | 29,818 | 471 | 41 | 1,311 | 3,263 | 0 | 1,814 | 1,430 | 579 | 1,244 | 39,971 | 247,969 | 740 |
| **Total Imports** | **306,478** | **29,818** | **1,105** | **41** | **1,311** | **5,128** | **0** | **1,814** | **1,430** | **579** | **1,244** | **42,470** | **348,948** | **1,042** |
| **PAD District III** | | | | | | | | | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Algeria | 34,694 | 4,488 | 1,066 | 0 | 0 | 0 | 0 | 0 | 2,182 | 0 | 16,467 | 24,203 | 58,897 | 176 |
| Iraq | 93,751 | 0 | 930 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 930 | 94,681 | 283 |
| Kuwait | 24,881 | 790 | 3,155 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,945 | 28,826 | 86 |
| Neutral Zone[4] | 2,624 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,624 | 8 |
| Saudi Arabia | 207,187 | 4,981 | 31,864 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 660 | 37,505 | 244,692 | 730 |
| United Arab Emirates | 5,379 | 482 | 573 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 213 | 1,268 | 6,647 | 20 |
| Subtotal Arab OPEC | 368,516 | 10,741 | 37,588 | 0 | 0 | 0 | 0 | 0 | 2,182 | 0 | 17,340 | 67,851 | 436,367 | 1,303 |
| **Other OPEC** | | | | | | | | | | | | | | |
| Ecuador | 2,533 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,533 | 8 |
| Gabon | 3,113 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,113 | 9 |
| Indonesia | 18,831 | 0 | 922 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 922 | 19,753 | 59 |
| Iran | [5] 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | [5] 25 | [5] (s) |
| Nigeria | 54,110 | 0 | 603 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 603 | 54,713 | 163 |
| Venezuela | 109,309 | 1,080 | 13,670 | 1,179 | 1,811 | 0 | 0 | 2 | 520 | 0 | 407 | 18,669 | 127,978 | 382 |
| Subtotal Other OPEC | 187,921 | 1,080 | 15,195 | 1,179 | 1,811 | 0 | 0 | 2 | 520 | 0 | 407 | 20,194 | 208,115 | 621 |
| **Other** | | | | | | | | | | | | | | |
| Angola | 32,164 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32,164 | 96 |
| Argentina | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 279 | 17 | 296 | 296 | 1 |
| Australia | 8,952 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 51 | 51 | 9,003 | 27 |
| Bahama Islands | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 227 | 0 | 0 | 227 | 227 | 1 |
| Bahrain | 0 | 0 | 275 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 275 | 275 | 1 |
| Belgium | 0 | 0 | 2,395 | 208 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 2,618 | 2,618 | 8 |
| Benin | 313 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 313 | 1 |
| Bermuda | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 8 | (s) |
| Brazil | 0 | 548 | 0 | 51 | 747 | 0 | 0 | 0 | 0 | 70 | 7 | 1,423 | 1,423 | 4 |
| Cameroon | 3,743 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,743 | 11 |
| Canada | 3,510 | 1 | 1,710 | 40 | 0 | 0 | 0 | 600 | 701 | 567 | 522 | 4,141 | 7,651 | 23 |
| China, People's Republic of | 15,740 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 146 | 146 | 15,886 | 47 |
| Colombia | 25,577 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25,577 | 76 |
| Congo | 7,914 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7,914 | 24 |
| Egypt | 692 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 | 696 | 2 |
| France | 0 | 41 | 639 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 123 | 803 | 803 | 2 |

See footnotes at end of table

## Table 19. Year-to-Date Imports of Crude Oil and Petroleum Products by Source and PAD District,[1] January - November 1988 (continued)
(Thousand Barrels)

| Source | Crude Oil [2] | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Products [3] | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **PAD District III (continued)** | | | | | | | | | | | | | |
| **Other (continued)** | | | | | | | | | | | | | | |
| Germany FD (W) | 0 | 1 | 359 | 0 | 0 | 0 | 0 | 0 | 252 | 4 | 34 | 650 | 650 | 2 |
| Ghana | 0 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 18 | (s) |
| Greece | 0 | 0 | 239 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 239 | 239 | 1 |
| Guatemala | 859 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 859 | 3 |
| India | 100 | 0 | 5,825 | 0 | 0 | 0 | 0 | 0 | 0 | 1,548 | 1,729 | 9,102 | 9,202 | 27 |
| Ireland | 0 | 0 | 174 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 174 | 174 | 1 |
| Israel | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 36 | 0 | 36 | 36 | (s) |
| Italy | 351 | 0 | 3,128 | 0 | 0 | 0 | 0 | 0 | 0 | 80 | 90 | 3,298 | 3,649 | 11 |
| Japan | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 36 | 192 | 228 | 228 | 1 |
| Malaysia | 1,556 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,556 | 5 |
| Mexico | 180,372 | 8,280 | 0 | 440 | 312 | 1,175 | 0 | 0 | 2,353 | 0 | 242 | 12,802 | 193,174 | 577 |
| Netherlands Antilles | 0 | 12 | 211 | 310 | 248 | 0 | 0 | 0 | 0 | 0 | 59 | 840 | 840 | 3 |
| Netherlands | 0 | 0 | 158 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 300 | 473 | 473 | 1 |
| Norway | 7,110 | 0 | 275 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 275 | 7,385 | 22 |
| Oman | 1,600 | 0 | 1,248 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,248 | 2,848 | 9 |
| Panama | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | (s) |
| Portugal | 0 | 0 | 0 | 22 | 0 | 0 | 0 | 0 | 0 | 28 | 45 | 95 | 95 | (s) |
| Puerto Rico | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 804 | 804 | 804 | 2 |
| South Africa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 5 | (s) |
| Spain | 0 | 69 | 2,242 | 0 | 1 | 86 | 0 | 0 | 1 | 0 | 0 | 2,399 | 2,399 | 7 |
| Sweden | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 250 | 250 | 250 | 1 |
| Trinidad and Tobago | 18,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18,000 | 54 |
| Tunisia | 0 | 0 | 220 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 220 | 220 | 1 |
| Turkey | 0 | 0 | 1,878 | 0 | 0 | 0 | 0 | 0 | 0 | 34 | 305 | 2,217 | 2,217 | 7 |
| United Kingdom | 41,390 | 86 | 1,373 | 0 | 0 | 0 | 0 | 0 | 615 | 0 | 154 | 2,228 | 43,618 | 130 |
| U.S.S.R. | 0 | 0 | 2,460 | 0 | 0 | 0 | 0 | 0 | 717 | 0 | 0 | 3,177 | 3,177 | 9 |
| Virgin Islands | 0 | 0 | 416 | 0 | 0 | 229 | 1,542 | 0 | 0 | 0 | 0 | 2,187 | 2,187 | 7 |
| Yemen (Sanaa) | 2,300 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,300 | 7 |
| Zaire | 4,524 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,524 | 14 |
| Subtotal Other | 356,767 | 9,039 | 25,251 | 1,071 | 1,308 | 1,490 | 1,542 | 600 | 4,866 | 2,697 | 5,094 | 52,958 | 409,725 | 1,223 |
| **Total Imports** | **913,204** | **20,861** | **78,034** | **2,250** | **3,119** | **1,490** | **1,542** | **602** | **7,568** | **2,697** | **22,841** | **141,003** | **1,054,207** | **3,147** |
| | **PAD District IV** | | | | | | | | | | | | | |
| **Other** | | | | | | | | | | | | | | |
| Canada | 21,022 | 3,933 | 0 | 0 | 532 | 0 | 0 | 832 | 2 | 1 | 328 | 5,628 | 26,650 | 80 |
| China, People's Republic of | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | (s) |
| Malta | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | (s) | (s) |
| Subtotal Other | 21,022 | 3,934 | 0 | 0 | 532 | 0 | 0 | 832 | 2 | 1 | 328 | 5,629 | 26,651 | 80 |
| **Total Imports** | **21,022** | **3,934** | **0** | **0** | **532** | **0** | **0** | **832** | **2** | **1** | **328** | **5,629** | **26,651** | **80** |

See footnotes at end of table.

## Table 19. Year-to-Date Imports of Crude Oil and Petroleum Products by Source and PAD District,[1] January - November 1988 (continued)
(Thousand Barrels)

| Source | Crude Oil [2] | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Products [3] | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PAD District V** | | | | | | | | | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Kuwait | 0 | 0 | 0 | 0 | 0 | 45 | 0 | 0 | 0 | 0 | 0 | 45 | 45 | (s) |
| Saudi Arabia | 0 | 0 | 0 | 0 | 1,742 | 779 | 0 | 0 | 0 | 0 | 0 | 2,521 | 2,521 | 8 |
| United Arab Emirates | 450 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 450 | 1 |
| Subtotal Arab OPEC | 450 | 0 | 0 | 0 | 1,742 | 824 | 0 | 0 | 0 | 0 | 0 | 2,566 | 3,016 | 9 |
| **Other OPEC** | | | | | | | | | | | | | | |
| Ecuador | 291 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 291 | 1 |
| Indonesia | 37,939 | 0 | 254 | 0 | 0 | 0 | 0 | 0 | 503 | 0 | 524 | 1,281 | 39,220 | 117 |
| Venezuela | 0 | 0 | 0 | 0 | 256 | 725 | 0 | 0 | 0 | 0 | 211 | 1,192 | 1,192 | 4 |
| Subtotal Other OPEC | 38,230 | 0 | 254 | 0 | 256 | 725 | 0 | 0 | 503 | 0 | 735 | 2,473 | 40,703 | 122 |
| **Other** | | | | | | | | | | | | | | |
| Australia | 6,621 | 96 | 0 | 0 | 0 | 0 | 0 | 0 | 731 | 0 | 0 | 827 | 7,448 | 22 |
| Brazil | 0 | 0 | 0 | 0 | 1,022 | 0 | 0 | 0 | 0 | 0 | 0 | 1,022 | 1,022 | 3 |
| Brunei | 338 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 338 | 1 |
| Canada | 5,097 | 2,920 | 0 | 0 | 1,570 | 382 | 0 | 822 | 228 | 91 | 341 | 6,355 | 11,452 | 34 |
| China, People's Republic of | 2,132 | 0 | 0 | 307 | 1,162 | 0 | 0 | 0 | 0 | 0 | 0 | 1,469 | 3,601 | 11 |
| China, Taiwan | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 58 | 74 | 74 | (s) |
| France | 0 | 0 | 0 | 0 | 252 | 0 | 0 | 0 | 0 | 0 | 0 | 252 | 252 | 1 |
| Hong Kong | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | (s) | (s) |
| Italy | 0 | 0 | 0 | 0 | 0 | 418 | 0 | 0 | 0 | 0 | 0 | 418 | 418 | 1 |
| Japan | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 57 | 0 | 0 | 202 | 278 | 278 | 1 |
| Korea, Republic of | 0 | 5 | 0 | 0 | 0 | 258 | 0 | 0 | 0 | 0 | 189 | 452 | 452 | 1 |
| Malaysia | 3,275 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,275 | 10 |
| Mexico | 0 | 0 | 0 | 0 | 490 | 470 | 0 | 100 | 4 | 0 | 256 | 1,320 | 1,320 | 4 |
| Netherlands Antilles | 0 | 0 | 0 | 0 | 269 | 0 | 0 | 0 | 0 | 0 | 0 | 269 | 269 | 1 |
| Netherlands | 0 | 8 | 0 | 0 | 708 | 0 | 0 | 0 | 0 | 0 | 0 | 716 | 716 | 2 |
| Philippines | 0 | 74 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 74 | 74 | (s) |
| Singapore | 0 | 0 | 601 | 13 | 0 | 1,154 | 0 | 0 | 2,303 | 0 | 0 | 4,071 | 4,071 | 12 |
| South Africa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 | 4 | (s) |
| Switzerland | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | (s) | (s) |
| Thailand | 1,431 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,431 | 4 |
| United Kingdom | 0 | 218 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 218 | 218 | 1 |
| Subtotal Other | 18,894 | 3,357 | 601 | 320 | 5,473 | 2,682 | 0 | 979 | 3,266 | 91 | 1,050 | 17,818 | 36,712 | 110 |
| **Total Imports** | **57,574** | **3,357** | **855** | **320** | **7,471** | **4,231** | **0** | **979** | **3,769** | **91** | **1,785** | **22,857** | **80,431** | **240** |

[1] Crude Oil and unfinished oils are reported by the PAD District in which they are to be processed, all other products are reported by the PAD District of entry

[2] Includes crude oil imported for storage in the Strategic Petroleum Reserve

[3] Includes aviation gasoline, aviation gasoline blending components, waxes, asphalt, lubricants, pentanes plus, naphthas less than 400 degrees F endpoint, other oils equal to or greater than 400 degrees F endpoint, petroleum coke and miscellaneous products

[4] Beginning in January 1988, imports of crude oil and petroleum products from the Neutral Zone are shown separately. Prior to January 1988, these data were included with imports from Saudi Arabia and Kuwait

[5] A small amount of Iranian crude oil entered the United States (defined in this publication as the 50 States and the District of Columbia) in January 1988 from the Virgin Islands. This oil originated in Iran and was exported to the Virgin Islands prior to the signing of Executive Order 12613 on Oct. 29, 1987

(s) Less than 500 barrels

Note Total may not equal sum of components due to independent rounding

Sources and estimation procedures See Explanatory Notes 1 and 2

## Table 20. Exports of Crude Oil and Petroleum Products by PAD District, November 1988
(Thousand Barrels)

| Commodity | Petroleum Administration for Defense Districts | | | | | | Daily Average |
|---|---|---|---|---|---|---|---|
| | I | II | III | IV | V | Total | |
| Crude Oil (including lease condensate) [1] | 1 | 378 | 0 | 0 | 4,158 | 4,537 | 151 |
| Natural Gas Liquids | 100 | 856 | 961 | 38 | 299 | 2,255 | 75 |
| Pentanes Plus | 0 | 114 | 0 | 0 | 0 | 114 | 4 |
| Liquefied Petroleum Gases | 100 | 742 | 961 | 38 | 299 | 2,141 | 71 |
| Ethane | (s) | 228 | (s) | 0 | (s) | 228 | 8 |
| Propane | 49 | 227 | 952 | 15 | 140 | 1,383 | 46 |
| Normal Butane | 51 | 174 | 9 | 23 | 159 | 416 | 14 |
| Isobutane | 0 | 114 | 0 | 0 | 0 | 114 | 4 |
| Finished Motor Gasoline | 11 | 3 | 231 | 0 | 202 | 447 | 15 |
| Naphtha-Type Jet Fuel | (s) | (s) | 2 | 1 | 0 | 3 | (s) |
| Kerosene-Type Jet Fuel | (s) | 1 | 54 | 0 | 215 | 271 | 9 |
| Kerosene | 2 | 56 | (s) | 0 | (s) | 59 | 2 |
| Distillate Fuel Oil | 15 | 2 | 785 | 0 | 231 | 1,033 | 34 |
| Residual Fuel Oil | 4 | 0 | 596 | 0 | 3,778 | 4,379 | 146 |
| Naphtha < 400 Deg. for Petro. Feed. Use | 79 | 27 | 159 | 1 | 14 | 280 | 9 |
| Other Oils > 400 Deg. for Petro. Feed. Use | (s) | 14 | 550 | 0 | 84 | 649 | 22 |
| Special Naphthas | 123 | 5 | 103 | (s) | 108 | 338 | 11 |
| Lubricants | 276 | 28 | 211 | 2 | 119 | 635 | 21 |
| Waxes | 3 | 2 | 29 | 0 | 8 | 43 | 1 |
| Petroleum Coke | 45 | 446 | 3,688 | 0 | 2,452 | 6,631 | 221 |
| Asphalt | (s) | 0 | 2 | 1 | 2 | 5 | (s) |
| Miscellaneous Products | 20 | 1 | 24 | 0 | 7 | 52 | 2 |
| Total Product Exports | 680 | 1,441 | 7,397 | 43 | 7,519 | 17,080 | 569 |
| **Total Exports** | **680** | **1,819** | **7,397** | **43** | **11,677** | **21,617** | **721** |

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[1] Crude oil exports are restricted to: 1) crude oil derived from fields under the State waters of Alaska's Cook Inlet; 2) certain domestically produced crude oil destined for Canada; and 3) shipments to U.S. territories.

(s) = Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 21. Year-to-Date Exports of Crude Oil and Petroleum Products by PAD District, January - November 1988
(Thousand Barrels)

| Commodity | Petroleum Administration for Defense Districts | | | | | | Daily Average |
|---|---|---|---|---|---|---|---|
| | I | II | III | IV | V | Total | |
| Crude Oil (including lease condensate) [1] | 1 | 3,645 | 0 | 0 | 50,331 | 53,977 | 161 |
| Natural Gas Liquids | 793 | 5,920 | 6,434 | 390 | 2,404 | 15,942 | 48 |
| Pentanes Plus | 0 | 720 | 0 | 0 | 0 | 720 | 2 |
| Liquefied Petroleum Gases | 793 | 5,200 | 6,434 | 390 | 2,404 | 15,222 | 45 |
| Ethane | 7 | 1,442 | 2 | 0 | 1 | 1,451 | 4 |
| Propane | 346 | 1,583 | 6,155 | 156 | 1,068 | 9,309 | 28 |
| Normal Butane | 441 | 1,455 | 277 | 234 | 1,335 | 3,742 | 11 |
| Isobutane | 0 | 720 | 0 | 0 | 0 | 720 | 2 |
| Finished Motor Gasoline | 215 | 663 | 4,635 | 1 | 1,163 | 6,677 | 20 |
| Naphtha-Type Jet Fuel | 9 | (s) | 247 | 2 | 157 | 416 | 1 |
| Kerosene-Type Jet Fuel | 274 | 5 | 4,914 | (s) | 2,040 | 7,233 | 22 |
| Kerosene | 88 | 242 | 43 | 1 | 3 | 376 | 1 |
| Distillate Fuel Oil | 341 | 423 | 11,172 | 1 | 10,470 | 22,407 | 67 |
| Residual Fuel Oil | 163 | 0 | 18,441 | 0 | 46,118 | 64,722 | 193 |
| Naphtha < 400 Deg. for Petro. Feed Use | 598 | 275 | 733 | 10 | 181 | 1,798 | 5 |
| Other Oils > 400 Deg. for Petro. Feed Use | 17 | 341 | 3,578 | 0 | 1,715 | 5,651 | 17 |
| Special Naphthas | 414 | 167 | 918 | 2 | 697 | 2,198 | 7 |
| Lubricants | 2,320 | 444 | 3,781 | 39 | 1,541 | 8,124 | 24 |
| Waxes | 61 | 109 | 298 | (s) | 88 | 555 | 2 |
| Petroleum Coke | 1,947 | 1,836 | 43,526 | 2 | 30,239 | 77,549 | 231 |
| Asphalt | 9 | 170 | 13 | 8 | 56 | 257 | 1 |
| Miscellaneous Products | 327 | 25 | 187 | 1 | 59 | 598 | 2 |
| Total Product Exports | 7,575 | 10,619 | 98,921 | 456 | 96,932 | 214,503 | 640 |
| **Total Exports** | **7,576** | **14,264** | **98,921** | **456** | **147,263** | **268,480** | **801** |

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[1] Crude oil exports are restricted to 1) crude oil derived from fields under the State waters of Alaska's Cook Inlet, 2) certain domestically produced crude oil destined for Canada, and 3) shipments to U.S. territories.

(s) = Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 22. Exports of Crude Oil and Petroleum Products by Destination, November 1988
(Thousand Barrels)

| Destination | Crude Oil 1 | LPG | Finished Motor Gasoline | Jet Fuel | Dist. Fuel Oil | Residual Fuel Oil | Special Naphthas | Lubricants | Waxes | Petroleum Coke | Asphalt | Other2 | Total | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Argentina | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | (s) | 0 | 0 | (s) | 5 | (s) |
| Australia | 0 | 1 | 0 | 0 | 24 | 0 | (s) | 11 | (s) | 149 | (s) | 8 | 194 | 6 |
| Bahama Islands | 0 | 0 | 39 | 32 | 35 | 134 | 0 | 4 | 0 | 0 | 0 | 0 | 244 | 8 |
| Bahrain | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 0 | 0 | (s) | (s) | (s) |
| Belgium & Luxembourg | 0 | 89 | 0 | 0 | 0 | 0 | 19 | 10 | (s) | 639 | (s) | 20 | 776 | 26 |
| Brazil | 0 | 1 | 1 | 0 | 0 | 33 | 7 | 2 | (s) | 55 | (s) | 1 | 100 | 3 |
| Cameroon | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 0 | 0 | 0 | (s) | (s) |
| Canada | 379 | 857 | 16 | 11 | 294 | 116 | 12 | 80 | 4 | 788 | 1 | 222 | 2,780 | 93 |
| Chile | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 2 | (s) | (s) | (s) | 1 | 3 | (s) |
| China, Taiwan | 0 | 1 | 0 | 0 | 1 | 1,447 | 2 | 45 | 2 | 3 | (s) | 10 | 1,511 | 50 |
| Colombia | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 13 | 0 | (s) | 0 | 1 | 18 | 1 |
| Costa Rica | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 10 | (s) | 0 | 0 | 8 | 21 | 1 |
| Denmark | 0 | (s) | 0 | 0 | 0 | 0 | (s) | (s) | 0 | 0 | (s) | (s) | 2 | (s) |
| Dominican Republic | 0 | (s) | (s) | 0 | 1 | 0 | 4 | 4 | (s) | 0 | 0 | (s) | 10 | (s) |
| Ecuador | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 3 | (s) |
| Egypt | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 1 | 5 | (s) |
| El Salvador | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | (s) | 4 | (s) |
| Finland | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 0 | 0 | 1 | 1 | (s) |
| France | 0 | 44 | 0 | 0 | 0 | 0 | 1 | 2 | 19 | 259 | 0 | 212 | 537 | 18 |
| French Pacific Isl | 0 | (s) | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 0 | 0 | 0 | (s) | (s) |
| Germany FD (W) | 0 | 2 | 0 | 0 | 1 | 0 | (s) | 5 | (s) | 243 | (s) | 1 | 252 | 8 |
| Ghana | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 45 | (s) | 0 | 45 | 1 |
| Greece | 0 | 3 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 0 | 0 | (s) | 3 | (s) |
| Guatemala | 0 | 49 | 141 | 22 | 168 | 169 | 0 | 4 | (s) | 0 | 0 | (s) | 554 | 18 |
| Honduras | 0 | 0 | 0 | 0 | (s) | 0 | 0 | 1 | (s) | 0 | 0 | (s) | 2 | (s) |
| Hong Kong | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 2 | 1 | 0 | 0 | 1 | 4 | (s) |
| India | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 5 | (s) | 0 | 0 | (s) | 22 | 1 |
| Iran | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Israel | 0 | 1 | 0 | 0 | 0 | 0 | (s) | 2 | 0 | 0 | 0 | 0 | 3 | (s) |
| Italy | 0 | 38 | 0 | 0 | 0 | 0 | 0 | 1 | (s) | 501 | (s) | 1 | 542 | 18 |
| Jamaica | 0 | 12 | 0 | 0 | 83 | 315 | (s) | 4 | (s) | 0 | 0 | 1 | 415 | 14 |
| Japan | 0 | 6 | 198 | 206 | 77 | 438 | 132 | 63 | 3 | 1,484 | 0 | 27 | 2,635 | 88 |
| Jordan | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 2 | (s) |
| Korea, Republic of | 0 | 109 | 1 | 0 | 129 | 388 | 17 | 39 | (s) | 1 | 0 | 87 | 771 | 26 |
| Kuwait | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 0 | 0 | 0 | (s) | (s) |
| Lebanon | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 227 | 0 | (s) | 228 | 8 |
| Liberia | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | (s) |
| Malaysia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | (s) | 0 | 0 | (s) | 1 | (s) |
| Mexico | 0 | 849 | 50 | 0 | 1 | 1,319 | 5 | 77 | 8 | 84 | 1 | 21 | 2,416 | 81 |
| Netherlands | 0 | 27 | (s) | 0 | 0 | 19 | 103 | 9 | (s) | 442 | 0 | 319 | 919 | 31 |
| Netherlands Antilles | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | (s) | 3 | (s) |
| New Zealand | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | (s) | 0 | 3 | 5 | (s) |
| Nigeria | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | (s) | 3 | (s) |
| Norway | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | (s) | 0 | 0 | (s) | (s) | (s) |
| Panama | 0 | (s) | 0 | 2 | 23 | 0 | 0 | 2 | (s) | 0 | (s) | 3 | 30 | 1 |
| Peru | 0 | 7 | 0 | 0 | 197 | 0 | 0 | 2 | (s) | 0 | 0 | (s) | 206 | 7 |
| Philippines | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | (s) | 0 | 0 | 1 | 7 | (s) |
| Puerto Rico | 901 | 5 | 0 | 0 | 0 | 1 | (s) | 30 | 1 | 0 | 0 | 12 | 951 | 32 |
| South Africa | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 1 | (s) | 0 | (s) | (s) | 2 | (s) |
| Saudi Arabia | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 1 | 0 | 1 | 10 | (s) |

See footnotes at end of table.

## Table 22. Exports of Crude Oil and Petroleum Products by Destination, November 1988 (continued)
(Thousand Barrels)

| Destination | Crude Oil [1] | LPG | Finished Motor Gasoline | Jet Fuel | Dist Fuel Oil | Residual Fuel Oil | Special Naphthas | Lubricants | Waxes | Petroleum Coke | Asphalt | Other[2] | Total | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Singapore | 0 | 1 | 0 | 0 | 0 | 0 | (s) | 7 | (s) | (s) | 0 | 7 | 15 | 1 |
| Spain | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 8 | (s) | 898 | 0 | 110 | 1,017 | 34 |
| Surinam | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 26 | 1 |
| Sweden | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | (s) | 0 | 0 | 1 | 5 | (s) |
| Switzerland | 0 | 1 | 0 | 0 | (s) | 0 | 0 | 1 | (s) | 0 | 0 | (s) | 2 | (s) |
| Thailand | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 4 | (s) | 0 | 0 | 2 | 7 | (s) |
| Trinidad and Tobago | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 1 | 0 | (s) | 1 | (s) |
| Turkey | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 3 | (s) |
| United Arab Emirates | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | (s) | 10 | (s) |
| United Kingdom | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 3 | (s) | 701 | 1 | 51 | 756 | 25 |
| U S S R | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 116 | 0 | 73 | 0 | 0 | 189 | 6 |
| Uruguay | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | (s) | 2 | (s) |
| Venezuela | 0 | (s) | 0 | 0 | 0 | 0 | 9 | 3 | (s) | 1 | 0 | 4 | 17 | 1 |
| Virgin Islands | 3,257 | 0 | 0 | (s) | 0 | 0 | 0 | 1 | 0 | 0 | 0 | (s) | 3 258 | 109 |
| Yugoslavia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 0 | 0 | 0 | (s) | (s) |
| Other | 0 | 7 | 0 | 0 | 0 | 0 | 2 | 13 | 1 | 28 | 1 | 10 | 62 | 2 |
| **Total** | **4,537** | **2,141** | **447** | **274** | **1,033** | **4,379** | **338** | **635** | **43** | **6,631** | **5** | **1,154** | **21,617** | **721** |

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[1] Crude oil exports are restricted to 1) crude oil derived from fields under the State waters of Alaska's Cook Inlet, 2) certain domestically produced crude oil destined for Canada, and 3) shipments to U S territories

[2] Includes pentanes plus, kerosene, naphtha less than 400 degrees F endpoint, other oils equal to or greater than 400 degrees F endpoint and miscellaneous products

(s) Less than 500 barrels

Note Total may not equal sum of components due to independent rounding

Sources and estimation procedures See Explanatory Notes 1 and 2

## Table 23. Year-to-Date Exports of Crude Oil and Petroleum Products by Destination, January - November 1988

(Thousand Barrels)

| Destination | Crude Oil 1 | LPG | Finished Motor Gasoline | Jet Fuel | Dist. Fuel Oil | Residual Fuel Oil | Special Naphthas | Lubri-cants | Waxes | Petro-leum Coke | Asphalt | Other2 | Total | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Argentina | 0 | 41 | 0 | 0 | 220 | 256 | 9 | 60 | 1 | 6 | (s) | 118 | 711 | 2 |
| Australia | 0 | 18 | 0 | 0 | 253 | 2,033 | 57 | 102 | 5 | 2,509 | 1 | 53 | 5,032 | 15 |
| Bahama Islands | 0 | 112 | 573 | 328 | 1,936 | 3,841 | (s) | 39 | (s) | 0 | (s) | 1 | 6,830 | 20 |
| Bahrain | 0 | 1 | 0 | 0 | (s) | 0 | (s) | 1 | 0 | 381 | 0 | 2 | 384 | 1 |
| Belgium & Luxembourg | 0 | 113 | (s) | 0 | 0 | 0 | 104 | 218 | 10 | 7,409 | (s) | 30 | 7,885 | 24 |
| Brazil | 0 | 53 | 45 | 0 | 263 | 33 | 32 | 144 | (s) | 422 | (s) | 7 | 999 | 3 |
| Cameroon | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 188 | 0 | 0 | 188 | 1 |
| Canada | 3,656 | 6,204 | 1,223 | 2,139 | 3,475 | 3,084 | 232 | 1,340 | 135 | 4,259 | 219 | 1,823 | 27,787 | 83 |
| Chile | 0 | 3 | 0 | 0 | 211 | 0 | 11 | 182 | 3 | (s) | (s) | 11 | 420 | 1 |
| China, Taiwan | 951 | 38 | 1 | 0 | 787 | 13,457 | 5 | 491 | 30 | 259 | 1 | 94 | 16,114 | 48 |
| Colombia | 0 | (s) | 126 | 0 | 0 | 0 | 11 | 74 | (s) | 2 | (s) | 18 | 231 | 1 |
| Costa Rica | 0 | 1 | 21 | 0 | (s) | 0 | 29 | 104 | 1 | 20 | (s) | 44 | 221 | 1 |
| Denmark | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 3 | (s) | 771 | 1 | 10 | 790 | 2 |
| Dominican Republic | 0 | 65 | 4 | 0 | 58 | 0 | 6 | 34 | 1 | (s) | 0 | 7 | 177 | 1 |
| Ecuador | 0 | (s) | 52 | 10 | (s) | 0 | 3 | 128 | 1 | 0 | (s) | 9 | 204 | 1 |
| Egypt | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 12 | (s) | 268 | (s) | 2 | 282 | 1 |
| El Salvador | 0 | 17 | 97 | 0 | 78 | 0 | 3 | 34 | (s) | (s) | 0 | 36 | 264 | 1 |
| Finland | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 174 | (s) | 2 | 188 | 1 |
| France | 0 | 72 | (s) | 0 | 0 | 107 | 2 | 31 | 78 | 2,766 | (s) | 1,021 | 4,077 | 12 |
| French Pacific Isl | 0 | 2 | 0 | 0 | 392 | 1,357 | (s) | 4 | 0 | 0 | 0 | 0 | 1,755 | 5 |
| Germany FD (W) | 0 | 23 | 2 | 0 | 1 | 0 | 16 | 170 | 31 | 868 | 9 | 86 | 1,206 | 4 |
| Ghana | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 2 | 0 | 367 | (s) | 1 | 370 | 1 |
| Greece | 0 | 10 | 0 | 0 | 0 | 0 | 2 | 8 | (s) | 1,470 | 0 | (s) | 1,490 | 4 |
| Guatemala | 0 | 839 | 931 | 92 | 1,444 | 169 | 12 | 106 | 1 | (s) | (s) | 20 | 3,615 | 11 |
| Guinea | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | (s) | 7 | (s) |
| Honduras | 0 | 60 | 25 | 20 | 70 | 45 | 6 | 30 | 3 | 0 | 0 | 12 | 270 | 1 |
| Hong Kong | 0 | 6 | 0 | 0 | 0 | 0 | 1 | 30 | 2 | (s) | (s) | 5 | 44 | (s) |
| India | 0 | 1 | 0 | 0 | 0 | 0 | 20 | 117 | 2 | (s) | (s) | 43 | 183 | 1 |
| Indonesia | 0 | 1 | 0 | 0 | 0 | 0 | 4 | 30 | (s) | 194 | (s) | 1 | 231 | 1 |
| Iran | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Israel | 0 | 3 | 39 | 448 | 0 | 0 | 11 | 26 | (s) | 282 | 0 | 8 | 817 | 2 |
| Italy | 0 | 150 | 3 | 0 | 0 | 0 | 26 | 39 | 7 | 9,166 | 1 | 874 | 10,265 | 31 |
| Ivory Coast | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | (s) | 0 | (s) | (s) | 25 | (s) |
| Jamaica | 0 | 196 | 168 | 0 | 538 | 2,364 | 2 | 52 | 1 | (s) | 0 | 9 | 3,330 | 10 |
| Japan | 0 | 59 | 2,300 | 3,550 | 6,381 | 5,791 | 933 | 548 | 33 | 19,993 | (s) | 717 | 40,305 | 120 |
| Jordan | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 2 | 12 | (s) |
| Korea, Republic of | 0 | 232 | 3 | 0 | 371 | 3,464 | 67 | 330 | 4 | 1,198 | (s) | 920 | 6,591 | 20 |
| Kuwait | 0 | 1 | 0 | 0 | 0 | 0 | (s) | 12 | 0 | 0 | 0 | 3 | 16 | (s) |
| Lebanon | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 7 | (s) | 348 | 0 | 1 | 356 | 1 |
| Liberia | 0 | (s) | 0 | 0 | 0 | 21 | 0 | 1 | 0 | 0 | (s) | (s) | 21 | (s) |
| Malaysia | 0 | (s) | 0 | 0 | 0 | 0 | 3 | 17 | 4 | 11 | (s) | 53 | 88 | (s) |
| Mexico | 0 | 6,051 | 190 | 18 | 2 | 13,448 | 60 | 986 | 143 | 831 | 2 | 161 | 21,892 | 65 |
| Netherlands | 0 | 71 | 19 | 0 | 0 | 19 | 314 | 104 | 6 | 7,881 | 1 | 678 | 9,093 | 27 |
| Netherlands Antilles | 0 | (s) | 9 | 2 | 79 | 5,054 | 1 | 19 | 0 | 0 | 0 | 5 | 5,168 | 15 |
| New Zealand | 0 | 1 | 0 | 0 | 0 | 0 | 9 | 13 | 1 | 397 | 1 | 15 | 437 | 1 |
| Nigeria | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 97 | 1 | 0 | (s) | 1 | 98 | (s) |
| Norway | 0 | 6 | 0 | 0 | (s) | 0 | (s) | 6 | (s) | 1,041 | (s) | 2 | 1,055 | 3 |
| Pacific Trust Terr. | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | (s) | 8 | (s) |
| Panama | 0 | 20 | 409 | 2 | 1,051 | 1,179 | 9 | 261 | (s) | 0 | 1 | 21 | 2,953 | 9 |
| Peru | 0 | 29 | 45 | 900 | 2,808 | 0 | 1 | 105 | (s) | 1 | (s) | 8 | 3,896 | 12 |
| Philippines | 0 | 30 | 0 | 0 | 0 | 0 | 9 | 49 | 3 | 27 | (s) | 127 | 245 | 1 |
| Puerto Rico | 5,831 | 97 | 138 | 119 | 308 | 95 | 15 | 364 | 13 | 11 | (s) | 146 | 7,138 | 21 |
| South Africa | 0 | 48 | 0 | 0 | (s) | 0 | (s) | 9 | 1 | 362 | (s) | 15 | 435 | 1 |

See footnotes at end of table.

## Table 23. Year-to-Date Exports of Crude Oil and Petroleum Products by Destination, January - November 1988 (continued)

(Thousand Barrels)

| Destination | Crude Oil 1 | LPG | Finished Motor Gasoline | Jet Fuel | Dist. Fuel Oil | Residual Fuel Oil | Special Naphthas | Lubricants | Waxes | Petroleum Coke | Asphalt | Other2 | Total | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Saudi Arabia | 0 | 116 | 0 | 0 | (s) | 0 | 2 | 69 | (s) | 3 | (s) | 31 | 220 | 1 |
| Singapore | 0 | 8 | 0 | 0 | 326 | 4,513 | 18 | 56 | (s) | 58 | (s) | 171 | 5,150 | 15 |
| Spain | 0 | (s) | 0 | 0 | 529 | 3,103 | 1 | 45 | 19 | 7,151 | (s) | 685 | 11,533 | 34 |
| Surinam | 0 | 71 | 0 | 0 | 0 | 0 | (s) | 9 | 0 | 22 | 0 | 1 | 102 | (s) |
| Sweden | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 17 | 1 | 307 | 1 | 5 | 332 | 1 |
| Switzerland | 0 | 2 | 0 | 0 | 1 | 0 | 1 | 14 | (s) | 0 | (s) | 3 | 21 | (s) |
| Thailand | 0 | 3 | 0 | 0 | 0 | 0 | 7 | 34 | 1 | (s) | (s) | 303 | 349 | 1 |
| Trinidad and Tobago | 0 | 7 | 0 | 0 | 80 | 0 | 108 | 2 | (s) | 1 | 0 | 4 | 201 | 1 |
| Turkey | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 38 | (s) | 1,174 | 0 | 2 | 1,215 | 4 |
| United Arab Emirates | 0 | 5 | 0 | 0 | 0 | 5 | (s) | 71 | 0 | 247 | (s) | 9 | 337 | 1 |
| United Kingdom | 0 | 84 | 75 | 0 | 4 | 204 | 2 | 60 | 5 | 2,187 | 7 | 459 | 3,089 | 9 |
| U.S.S.R. | 0 | 0 | 0 | 0 | 0 | 25 | 0 | 850 | 0 | 433 | 1 | 59 | 1,367 | 4 |
| Uruguay | 0 | (s) | 16 | 0 | 0 | 182 | 0 | 10 | (s) | 0 | 0 | 1 | 209 | 1 |
| Venezuela | 0 | 14 | 0 | 5 | (s) | 0 | 21 | 43 | 3 | 908 | (s) | 33 | 1,028 | 3 |
| Virgin Islands | 43,538 | 4 | 7 | (s) | 0 | 125 | 0 | 20 | 0 | 0 | 0 | 10 | 43,703 | 130 |
| Yugoslavia | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 1 | 0 | 269 | 1 | 2 | 272 | 1 |
| Other | 0 | 226 | 157 | 16 | 740 | 749 | 10 | 194 | 3 | 907 | 5 | 143 | 3,150 | 9 |
| **Total** | **53,977** | **15,222** | **6,677** | **7,649** | **22,407** | **64,722** | **2,198** | **8,124** | **555** | **77,549** | **257** | **9,142** | **268,480** | **801** |

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[1] Crude oil exports are restricted to: 1) crude oil derived from fields under the State waters of Alaska's Cook Inlet, 2) certain domestically produced crude oil destined for Canada, and 3) shipments to U.S. territories.

[2] Includes pentanes plus, kerosene, naphtha less than 400 degrees F endpoint, other oils equal to or greater than 400 degrees F endpoint and miscellaneous products.

(s) = Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 24. Stocks of Crude Oil and Petroleum Products by PAD District, November 30, 1988
(Thousand Barrels)

| Commodity | PAD District I | | | PAD District II | | | | PAD District III | | | | | | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | East Coast | Appala-chian No.1 | Total | Ind., Ill., Ky. * | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast | |
| **Crude Oil (incl. lease condensate)** | | | | | | | | | | | | | | | | |
| Refinery | -- | -- | 13,500 | -- | -- | -- | 11,805 | -- | -- | -- | -- | -- | 47,708 | 1,701 | 21,419 | 96,133 |
| Tank Farms and Pipelines | -- | -- | 1,221 | -- | -- | -- | 58,659 | -- | -- | -- | -- | -- | 92,707 | 8,776 | 34,180 | 195,543 |
| Leases | -- | -- | 47 | -- | -- | -- | 1,652 | -- | -- | -- | -- | -- | 16,490 | 1,252 | 1,689 | 21,130 |
| Strategic Petroleum Reserve[1] | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | -- | -- | 558,673 | 0 | 0 | 558,673 |
| Alaskan In-Transit | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | -- | -- | 0 | 0 | 24,243 | 24,243 |
| Total | -- | -- | 14,768 | -- | -- | -- | 72,116 | -- | -- | -- | -- | -- | 715,578 | 11,729 | 81,531 | 895,722 |
| **Total Stocks, All Oils (excl. Crude Oil)** | | | | | | | | | | | | | | | | |
| Refinery | 42,953 | 3,050 | 46,003 | 37,420 | 6,398 | 14,418 | 58,236 | 10,763 | 81,447 | 50,297 | 5,172 | 1,065 | 148,744 | 11,021 | 66,818 | 330,822 |
| Bulk Terminal | -- | -- | 104,652 | -- | -- | -- | 72,321 | -- | -- | -- | -- | -- | 74,455 | 2,990 | 27,572 | 281,990 |
| Pipeline | -- | -- | 28,806 | -- | -- | -- | 35,163 | -- | -- | -- | -- | -- | 39,249 | 2,335 | 5,301 | 110,854 |
| Natural Gas Processing Plant | 157 | 46 | 203 | 228 | 60 | 2,644 | 2,932 | 1,265 | 7,510 | 2,488 | 140 | 116 | 11,519 | 193 | 138 | 14,985 |
| Total | -- | -- | 179,664 | -- | -- | -- | 168,652 | -- | -- | -- | -- | -- | 273,967 | 16,539 | 99,829 | 738,651 |
| **Pentanes Plus** | | | | | | | | | | | | | | | | |
| Refinery | 19 | 0 | 19 | 81 | 54 | 91 | 226 | 314 | 92 | 88 | 14 | 14 | 522 | 1 | 34 | 802 |
| Bulk Terminal | -- | -- | 36 | -- | -- | -- | 1,364 | -- | -- | -- | -- | -- | 1,939 | 0 | 21 | 3,360 |
| Pipeline | -- | -- | 0 | -- | -- | -- | 464 | -- | -- | -- | -- | -- | 912 | 80 | 0 | 1,456 |
| Natural Gas Processing Plant | 5 | 12 | 17 | 19 | 17 | 450 | 486 | 416 | 675 | 515 | 29 | 16 | 1,651 | 64 | 16 | 2,234 |
| Total | -- | -- | 72 | -- | -- | -- | 2,540 | -- | -- | -- | -- | -- | 5,024 | 145 | 71 | 7,852 |
| **Liquefied Petroleum Gases** | | | | | | | | | | | | | | | | |
| Refinery | 1,426 | 13 | 1,439 | 2,019 | 156 | 493 | 2,668 | 2,250 | 2,606 | 3,197 | 21 | 30 | 8,104 | 385 | 992 | 13,588 |
| Bulk Terminal | -- | -- | 2,200 | -- | -- | -- | 22,548 | -- | -- | -- | -- | -- | 45,553 | 134 | 2,639 | 73,074 |
| Pipeline | -- | -- | 1,763 | -- | -- | -- | 7,313 | -- | -- | -- | -- | -- | 6,203 | 435 | 0 | 15,714 |
| Natural Gas Processing Plant | 152 | 34 | 186 | 209 | 43 | 2,194 | 2,446 | 821 | 6,830 | 1,971 | 110 | 100 | 9,832 | 129 | 122 | 12,715 |
| Total | -- | -- | 5,588 | -- | -- | -- | 34,975 | -- | -- | -- | -- | -- | 69,692 | 1,083 | 3,753 | 115,091 |
| **Ethane** | | | | | | | | | | | | | | | | |
| Refinery | 23 | 0 | 23 | 1 | 0 | 0 | 1 | 93 | 364 | 0 | 0 | 0 | 457 | 0 | 0 | 481 |
| Bulk Terminal | -- | -- | 0 | -- | -- | -- | 2,681 | -- | -- | -- | -- | -- | 9,437 | 0 | 0 | 12,118 |
| Pipeline | -- | -- | 0 | -- | -- | -- | 1,346 | -- | -- | -- | -- | -- | 2,496 | 134 | 0 | 3,976 |
| Natural Gas Processing Plant | 0 | 0 | 0 | 17 | 0 | 478 | 495 | 91 | 1,584 | 132 | 13 | 21 | 1,841 | 2 | 0 | 2,338 |
| Total | -- | -- | 23 | -- | -- | -- | 4,523 | -- | -- | -- | -- | -- | 14,231 | 136 | 0 | 18,913 |

See footnotes at end of table.

## Table 24. Stocks of Crude Oil and Petroleum Products by PAD District, November 30, 1988 (continued)
(Thousand Barrels)

| Commodity | PAD District I | | | PAD District II | | | | PAD District III | | | | | | PAD Dist IV | PAD Dist V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | East Coast | Appalachian No.1 | Total | Ind., Ill., Ky. * | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N. La., Ark. | New Mexico | Total | Rocky Mt | West Coast | |
| **Propane** | | | | | | | | | | | | | | | | |
| Refinery | 1,212 | 2 | 1,214 | 1,423 | 37 | 147 | 1,607 | 1,335 | 855 | 1,602 | 5 | 4 | 3,801 | 151 | 84 | 6,857 |
| Bulk Terminal | -- | -- | 1,970 | -- | -- | -- | 13,889 | -- | -- | -- | -- | -- | 23,105 | 134 | 644 | 39,742 |
| Pipeline | -- | -- | 1,605 | -- | -- | -- | 4,331 | -- | -- | -- | -- | -- | 2,386 | 170 | 0 | 8,492 |
| Natural Gas Processing Plant | 109 | 22 | 131 | 132 | 32 | 1,171 | 1,335 | 424 | 1,777 | 131 | 46 | 52 | 2,430 | 81 | 105 | 4,082 |
| Total | -- | -- | 4,920 | -- | -- | -- | 21,162 | -- | -- | -- | -- | -- | 31,722 | 536 | 833 | 59,173 |
| **Normal Butane** | | | | | | | | | | | | | | | | |
| Refinery | 117 | 11 | 128 | 377 | 63 | 234 | 674 | 561 | 570 | 1,347 | 4 | 17 | 2,499 | 126 | 718 | 4,145 |
| Bulk Terminal | -- | -- | 228 | -- | -- | -- | 4,478 | -- | -- | -- | -- | -- | 9,718 | 0 | 1,706 | 16,130 |
| Pipeline | -- | -- | 158 | -- | -- | -- | 1,199 | -- | -- | -- | -- | -- | 808 | 82 | 0 | 2,247 |
| Natural Gas Processing Plant | 41 | 6 | 47 | 43 | 11 | 374 | 428 | 257 | 2,346 | 629 | 39 | 18 | 3,289 | 41 | 10 | 3,815 |
| Total | -- | -- | 561 | -- | -- | -- | 6,779 | -- | -- | -- | -- | -- | 16,314 | 249 | 2,434 | 26,337 |
| **Isobutane** | | | | | | | | | | | | | | | | |
| Refinery | 74 | 0 | 74 | 218 | 56 | 112 | 386 | 261 | 817 | 248 | 12 | 9 | 1,347 | 108 | 190 | 2,105 |
| Bulk Terminal | -- | -- | 2 | -- | -- | -- | 1,500 | -- | -- | -- | -- | -- | 3,293 | 0 | 289 | 5,084 |
| Pipeline | -- | -- | 0 | -- | -- | -- | 437 | -- | -- | -- | -- | -- | 513 | 49 | 0 | 999 |
| Natural Gas Processing Plant | 2 | 6 | 8 | 17 | 0 | 171 | 188 | 49 | 1,123 | 1,079 | 12 | 9 | 2,272 | 5 | 7 | 2,480 |
| Total | -- | -- | 84 | -- | -- | -- | 2,511 | -- | -- | -- | -- | -- | 7,425 | 162 | 486 | 10,668 |
| **Other Hydrocarbons and Alcohol** | | | | | | | | | | | | | | | | |
| Refinery | 28 | 0 | 28 | 137 | 3 | 48 | 188 | 0 | 124 | 91 | 0 | 8 | 223 | 36 | 5 | 480 |
| Total | -- | -- | 28 | -- | -- | -- | 188 | -- | -- | -- | -- | -- | 223 | 36 | 5 | 480 |
| **Unfinished Oils** | | | | | | | | | | | | | | | | |
| Refinery | | | | | | | | | | | | | | | | |
| Naphthas and Lighter | 4,114 | 215 | 4,329 | 2,652 | 136 | 994 | 3,782 | 784 | 8,532 | 4,674 | 157 | 22 | 14,169 | 390 | 5,397 | 28,067 |
| Kerosene and Light Gas Oils | 2,541 | 191 | 2,732 | 1,893 | 169 | 174 | 2,236 | 421 | 7,359 | 4,152 | 89 | 3 | 12,024 | 213 | 4,054 | 21,259 |
| Heavy Gas Oils | 4,994 | 259 | 5,253 | 5,660 | 422 | 1,555 | 7,637 | 515 | 8,342 | 7,185 | 509 | 156 | 16,707 | 832 | 13,686 | 44,115 |
| Residuum | 968 | 153 | 1,121 | 2,306 | 133 | 1,362 | 3,801 | 502 | 5,615 | 4,075 | 37 | 0 | 10,229 | 285 | 3,679 | 19,115 |
| Total | 12,617 | 818 | 13,435 | 12,511 | 860 | 4,085 | 17,456 | 2,222 | 29,848 | 20,086 | 792 | 181 | 53,129 | 1,720 | 26,816 | 112,556 |

See footnotes at end of table

## Table 24. Stocks of Crude Oil and Petroleum Products by PAD District, November 30, 1988 (continued)
(Thousand Barrels)

| Commodity | PAD District I |  |  | PAD District II |  |  |  | PAD District III |  |  |  |  |  | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | East Coast | Appala-chian No.1 | Total | Ind., Ill., Ky. * | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast |  |
| **Motor Gasoline Blending Components** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 4,338 | 103 | 4,441 | 4,451 | 590 | 1,510 | 6,551 | 1,340 | 7,828 | 5,522 | 140 | 198 | 15,028 | 1,978 | 7,868 | 35,866 |
| Bulk Terminal | -- | -- | 93 | -- | -- | -- | 269 | -- | -- | -- | -- | -- | 896 | 53 | 41 | 1,352 |
| Pipeline | -- | -- | 0 | -- | -- | -- | 61 | -- | -- | -- | -- | -- | 16 | 0 | 67 | 144 |
| Total | -- | -- | 4,534 | -- | -- | -- | 6,881 | -- | -- | -- | -- | -- | 15,940 | 2,031 | 7,976 | 37,362 |
| **Aviation Gasoline Blending Components** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 0 | 0 | 0 | 67 | 0 | 52 | 119 | 0 | 32 | 59 | 0 | 0 | 91 | 0 | 33 | 243 |
| Total | -- | -- | 0 | -- | -- | -- | 119 | -- | -- | -- | -- | -- | 91 | 0 | 33 | 243 |
| **Total Finished Motor Gasoline** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 8,202 | 404 | 8,606 | 5,934 | 1,241 | 2,650 | 9,825 | 1,995 | 11,184 | 5,866 | 720 | 168 | 19,933 | 1,977 | 8,502 | 48,843 |
| Bulk Terminal | -- | -- | 32,254 | -- | -- | -- | 25,363 | -- | -- | -- | -- | -- | 9,819 | 1,752 | 11,938 | 81,126 |
| Pipeline | -- | -- | 15,258 | -- | -- | -- | 16,299 | -- | -- | -- | -- | -- | 18,733 | 943 | 2,530 | 53,763 |
| Total | -- | -- | 56,118 | -- | -- | -- | 51,487 | -- | -- | -- | -- | -- | 48,485 | 4,672 | 22,970 | 183,732 |
| **Finished Leaded Motor Gasoline** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 751 | 120 | 871 | 1,128 | 365 | 891 | 2,384 | 558 | 1,754 | 1,218 | 144 | 67 | 3,741 | 824 | 2,204 | 10,024 |
| Bulk Terminal | -- | -- | 4,857 | -- | -- | -- | 6,597 | -- | -- | -- | -- | -- | 2,689 | 703 | 3,861 | 18,707 |
| Pipeline | -- | -- | 1,895 | -- | -- | -- | 3,612 | -- | -- | -- | -- | -- | 3,097 | 388 | 395 | 9,387 |
| Total | -- | -- | 7,623 | -- | -- | -- | 12,593 | -- | -- | -- | -- | -- | 9,527 | 1,915 | 6,460 | 38,118 |
| **Finished Unleaded Motor Gasoline** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 7,451 | 284 | 7,735 | 4,806 | 876 | 1,759 | 7,441 | 1,437 | 9,430 | 4,648 | 576 | 101 | 16,192 | 1,153 | 6,298 | 38,819 |
| Bulk Terminal | -- | -- | 27,397 | -- | -- | -- | 18,766 | -- | -- | -- | -- | -- | 7,130 | 1,049 | 8,077 | 62,419 |
| Pipeline | -- | -- | 13,363 | -- | -- | -- | 12,687 | -- | -- | -- | -- | -- | 15,636 | 555 | 2,135 | 44,376 |
| Total | -- | -- | 48,495 | -- | -- | -- | 38,894 | -- | -- | -- | -- | -- | 38,958 | 2,757 | 16,510 | 145,614 |
| **Finished Aviation Gasoline** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 82 | 0 | 82 | 92 | 26 | 9 | 127 | 89 | 285 | 134 | 0 | 0 | 508 | 34 | 226 | 977 |
| Bulk Terminal | -- | -- | 312 | -- | -- | -- | 274 | -- | -- | -- | -- | -- | 55 | 9 | 202 | 852 |
| Pipeline | -- | -- | 0 | -- | -- | -- | 80 | -- | -- | -- | -- | -- | 9 | 6 | 0 | 95 |
| Total | -- | -- | 394 | -- | -- | -- | 481 | -- | -- | -- | -- | -- | 572 | 49 | 428 | 1,924 |

See footnotes at end of table.

## Table 24. Stocks of Crude Oil and Petroleum Products by PAD District, November 30, 1988 (continued)

(Thousand Barrels)

| Commodity | PAD District I |  |  | PAD District II |  |  |  | PAD District III |  |  |  |  |  | PAD Dist IV | PAD Dist V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | East Coast | Appalachian No.1 | Total | Ind., Ill., Ky. * | Minn., Wisc., Daks | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N La., Ark | New Mexico | Total | Rocky Mt. | West Coast |  |
| **Naphtha-Type Jet Fuel** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 354 | 0 | 354 | 349 | 23 | 157 | 529 | 237 | 613 | 616 | 124 | 122 | 1,712 | 295 | 714 | 3,604 |
| Bulk Terminal | -- | -- | 617 | -- | -- | -- | 211 | -- | -- | -- | -- | -- | 140 | 9 | 608 | 1,585 |
| Pipeline | -- | -- | 92 | -- | -- | -- | 90 | -- | -- | -- | -- | -- | 490 | 90 | 485 | 1,247 |
| Total | -- | -- | 1,063 | -- | -- | -- | 830 | -- | -- | -- | -- | -- | 2,342 | 394 | 1,807 | 6,436 |
| **Kerosene-Type Jet Fuel** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 2,393 | 28 | 2,421 | 1,193 | 177 | 416 | 1,786 | 384 | 3,649 | 2,197 | 62 | 52 | 6,344 | 401 | 4,191 | 15,143 |
| Bulk Terminal | -- | -- | 4,561 | -- | -- | -- | 2,980 | -- | -- | -- | -- | -- | 2,234 | 135 | 2,745 | 12,655 |
| Pipeline | -- | -- | 3,777 | -- | -- | -- | 3,130 | -- | -- | -- | -- | -- | 4,368 | 163 | 782 | 12,220 |
| Total | -- | -- | 10,759 | -- | -- | -- | 7,896 | -- | -- | -- | -- | -- | 12,946 | 699 | 7,718 | 40,018 |
| **Kerosene** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 227 | 87 | 314 | 477 | 105 | 205 | 787 | 68 | 540 | 434 | 114 | 0 | 1,156 | 18 | 172 | 2,447 |
| Bulk Terminal | -- | -- | 3,338 | -- | -- | -- | 1,026 | -- | -- | -- | -- | -- | 497 | 18 | 29 | 4,908 |
| Pipeline | -- | -- | 204 | -- | -- | -- | 165 | -- | -- | -- | -- | -- | 373 | 0 | 18 | 760 |
| Total | -- | -- | 3,856 | -- | -- | -- | 1,978 | -- | -- | -- | -- | -- | 2,026 | 36 | 219 | 8,115 |
| **Distillate Fuel Oils** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 6,672 | 473 | 7,145 | 4,781 | 1,043 | 2,674 | 8,498 | 809 | 10,622 | 3,692 | 1,125 | 77 | 16,325 | 1,289 | 6,122 | 39,379 |
| Bulk Terminal | -- | -- | 39,651 | -- | -- | -- | 13,214 | -- | -- | -- | -- | -- | 5,651 | 823 | 5,063 | 64,402 |
| Pipeline | -- | -- | 7,712 | -- | -- | -- | 7,516 | -- | -- | -- | -- | -- | 7,864 | 618 | 1,227 | 24,937 |
| Natural Gas Processing Plant | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 1 | 0 | 0 | 6 | 0 | 0 | 6 |
| Total | -- | -- | 54,508 | -- | -- | -- | 29,228 | -- | -- | -- | -- | -- | 29,846 | 2,730 | 12,412 | 128,724 |
| **Residual Fuel Oils** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 2,491 | 66 | 2,557 | 1,769 | 193 | 180 | 2,142 | 182 | 4,048 | 2,419 | 253 | 6 | 6,908 | 627 | 6,213 | 18,447 |
| Bulk Terminal | -- | -- | 16,094 | -- | -- | -- | 1,246 | -- | -- | -- | -- | -- | 5,585 | 0 | 3,593 | 26,518 |
| Pipeline | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | -- | -- | 0 | 0 | 124 | 124 |
| Total | -- | -- | 18,651 | -- | -- | -- | 3,388 | -- | -- | -- | -- | -- | 12,493 | 627 | 9,930 | 45,089 |
| **Naphtha < 400 Deg. Petro. Feed. Use** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 345 | 0 | 345 | 295 | 0 | 95 | 390 | 66 | 816 | 289 | 26 | 10 | 1,207 | 28 | 150 | 2,120 |
| Total | 345 | 0 | 345 | 295 | 0 | 95 | 390 | 66 | 816 | 289 | 26 | 10 | 1,207 | 28 | 150 | 2,120 |
| **Other Oils > 400 Deg. Petro. Feed. Use** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Refinery | 5 | 0 | 5 | 2 | 0 | 0 | 2 | 108 | 1,406 | 246 | 0 | 0 | 1,760 | 2 | 180 | 1,949 |
| Total | 5 | 0 | 5 | 2 | 0 | 0 | 2 | 108 | 1,406 | 246 | 0 | 0 | 1,760 | 2 | 180 | 1,949 |

See footnotes at end of table

## Table 24. Stocks of Crude Oil and Petroleum Products by PAD District, November 30, 1988 (continued)
(Thousand Barrels)

| Commodity | PAD District I | | | PAD District II | | | | PAD District III | | | | | | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | East Coast | Appalachian No.1 | Total | Ind., Ill., Ky. * | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast | |
| **Special Naphthas** | | | | | | | | | | | | | | | | |
| Refinery | 494 | 48 | 542 | 225 | 0 | 106 | 331 | 75 | 1,131 | 40 | 203 | 0 | 1,449 | 7 | 118 | 2,447 |
| Bulk Terminal | -- | -- | 518 | -- | -- | -- | 311 | -- | -- | -- | -- | -- | 36 | 0 | 15 | 880 |
| Total | -- | -- | 1,060 | -- | -- | -- | 642 | -- | -- | -- | -- | -- | 1,485 | 7 | 133 | 3,327 |
| **Lubricants** | | | | | | | | | | | | | | | | |
| Refinery | 318 | 741 | 1,059 | 971 | 0 | 369 | 1,340 | 29 | 4,161 | 1,203 | 493 | 0 | 5,886 | 77 | 799 | 9,161 |
| Bulk Terminal | -- | -- | 1,567 | -- | -- | -- | 686 | -- | -- | -- | -- | -- | 566 | 1 | 527 | 3,347 |
| Total | -- | -- | 2,626 | -- | -- | -- | 2,026 | -- | -- | -- | -- | -- | 6,452 | 78 | 1,326 | 12,508 |
| **Waxes** | | | | | | | | | | | | | | | | |
| Refinery | 0 | 74 | 74 | 91 | 0 | 36 | 127 | 83 | 230 | 147 | 12 | 0 | 472 | 100 | 89 | 862 |
| Total | -- | -- | 74 | -- | -- | -- | 127 | -- | -- | -- | -- | -- | 472 | 100 | 89 | 862 |
| **Petroleum Coke** | | | | | | | | | | | | | | | | |
| Refinery | 844 | 0 | 844 | 343 | 962 | 104 | 1,409 | 10 | 830 | 3,004 | 256 | 0 | 4,100 | 18 | 1,930 | 8,301 |
| Total | 844 | 0 | 844 | 343 | 962 | 104 | 1,409 | 10 | 830 | 3,004 | 256 | 0 | 4,100 | 18 | 1,930 | 8,301 |
| **Asphalt and Road Oil** | | | | | | | | | | | | | | | | |
| Refinery | 1,912 | 158 | 2,070 | 1,487 | 941 | 1,125 | 3,553 | 467 | 1,009 | 770 | 817 | 199 | 3,262 | 1,969 | 1,444 | 12,298 |
| Bulk Terminal | -- | -- | 2,890 | -- | -- | -- | 2,665 | -- | -- | -- | -- | -- | 718 | 55 | 121 | 6,449 |
| Total | -- | -- | 4,960 | -- | -- | -- | 6,218 | -- | -- | -- | -- | -- | 3,980 | 2,024 | 1,565 | 18,747 |
| **Miscellaneous Products** | | | | | | | | | | | | | | | | |
| Refinery | 186 | 37 | 223 | 145 | 24 | 13 | 182 | 35 | 393 | 197 | 0 | 0 | 625 | 59 | 220 | 1,309 |
| Bulk Terminal | -- | -- | 521 | -- | -- | -- | 164 | -- | -- | -- | -- | -- | 766 | 1 | 30 | 1,482 |
| Pipeline | -- | -- | 0 | -- | -- | -- | 45 | -- | -- | -- | -- | -- | 281 | 0 | 68 | 394 |
| Natural Gas Processing Plant | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 | 0 | 1 | 1 | 0 | 30 | 0 | 0 | 30 |
| Total | -- | -- | 744 | -- | -- | -- | 391 | -- | -- | -- | -- | -- | 1,702 | 60 | 318 | 3,215 |
| **Total Stocks, All Oils** | -- | -- | 194,432 | -- | -- | -- | 240,768 | -- | -- | -- | -- | -- | 989,545 | 28,268 | 181,360 | 1,634,373 |

[1] Includes 38,395 thousand barrels of domestic crude oil.

* Effective January 1987 "Appalachian No.2" is combined with "Ind., Ill., Ky.".

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 25. Refinery and Bulk Terminal Stocks of Selected Petroleum Products by State, November 30, 1988

(Thousand Barrels)

| State | Leaded Motor Gasoline | Unleaded Motor Gasoline | Kerosene | Distillate Fuel Oil | Residual Fuel Oil |
|---|---|---|---|---|---|
| **PAD District I Total** | **5,728** | **35,132** | **3,652** | **46,796** | **18,651** |
| Connecticut | 311 | 844 | 684 | 3,545 | 262 |
| Delaware, D.C., Maryland | 201 | 2,023 | 262 | 4,248 | 1,932 |
| Florida | 705 | 4,790 | 201 | 2,093 | 1,141 |
| Georgia | 738 | 1,806 | 121 | 1,429 | 351 |
| Maine, New Hampshire, Vermont | 86 | 876 | 279 | 2,315 | 803 |
| Massachusetts | 109 | 2,083 | 73 | 2,386 | 1,318 |
| New Jersey | 623 | 8,041 | 96 | 12,165 | 6,560 |
| New York | 654 | 3,176 | 422 | 6,574 | 3,443 |
| North Carolina | 665 | 2,189 | 443 | 1,728 | 554 |
| Pennsylvania | 837 | 4,762 | 594 | 5,396 | 1,220 |
| Rhode Island | 16 | 647 | w | 1,361 | w |
| South Carolina | 321 | 1,289 | 230 | 905 | w |
| Virginia | 381 | 2,346 | 182 | 2,517 | 575 |
| West Virginia | 81 | 260 | w | 134 | w |
| **PAD District II Total** | **8,981** | **26,207** | **1,813** | **21,712** | **3,388** |
| Illinois | 1,776 | 5,433 | 309 | 4,043 | 1,610 |
| Indiana | 917 | 2,992 | 199 | 2,714 | 360 |
| Iowa | 395 | 1,095 | w | 963 | w |
| Kansas, Nebraska | 976 | 2,171 | 18 | 2,205 | 58 |
| Kentucky | 368 | 905 | 68 | 761 | w |
| Michigan | 762 | 2,916 | 182 | 1,956 | 170 |
| Minnesota | 586 | 1,400 | w | 1,503 | 127 |
| Missouri | 431 | 1,055 | w | 695 | w |
| North Dakota, South Dakota | 254 | 404 | w | 666 | w |
| Ohio | 816 | 3,627 | 630 | 2,134 | 250 |
| Oklahoma | 702 | 1,074 | w | 1,573 | 280 |
| Tennessee | 414 | 1,628 | 91 | 1,001 | 184 |
| Wisconsin | 584 | 1,507 | w | 1,498 | 68 |
| **PAD District III Total** | **6,430** | **23,322** | **1,653** | **21,976** | **12,493** |
| Alabama | 400 | 1,138 | 119 | 977 | 901 |
| Arkansas | 142 | 296 | w | 176 | w |
| Louisiana | 1,161 | 4,845 | 553 | 3,910 | 5,183 |
| Mississippi | 656 | 2,032 | 65 | 2,092 | w |
| New Mexico | 167 | 271 | w | 153 | 6 |
| Texas | 3,904 | 14,740 | 911 | 14,668 | 6,240 |
| **PAD District IV Total** | **1,527** | **2,202** | **36** | **2,112** | **627** |
| Colorado | 448 | 640 | w | 388 | w |
| Idaho | 158 | 260 | w | 229 | w |
| Montana | 430 | 520 | w | 585 | 107 |
| Utah | 191 | 243 | w | 345 | 132 |
| Wyoming | 300 | 539 | w | 565 | w |
| **PAD District V Total** | **6,065** | **14,375** | **201** | **11,185** | **9,806** |
| Alaska | 282 | 475 | w | 1,027 | w |
| Arizona | 345 | 623 | w | 152 | w |
| California | 3,309 | 9,392 | 113 | 6,668 | 5,308 |
| Hawaii | 74 | 530 | w | 613 | w |
| Nevada | 125 | 247 | w | 167 | w |
| Oregon | 668 | 622 | w | 883 | 197 |
| Washington | 1,262 | 2,486 | w | 1,675 | 2,374 |
| **U.S. Total** | **28,731** | **101,238** | **7,355** | **103,781** | **44,965** |

w = Withheld to avoid disclosure of individual company data.
Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 26. Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, and Barge Between PAD Districts, November 1988
(Thousand Barrels)

| Commodity | From I to | | | From II to | | | | From III to | | | | From IV to | | | From V to | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | II | III | V | I | III | IV | V | I | II | IV | V | II | III | V | I | II | III | IV |
| **Crude Oil** | **0** | **0** | **0** | **119** | **2,562** | **694** | **0** | **380** | **48,113** | **0** | **0** | **5,901** | **2,162** | **0** | **934** | **0** | **14,592** | **0** |
| **Petroleum Products** | **7,497** | **252** | **0** | **3,865** | **5,857** | **1,449** | **0** | **77,315** | **28,912** | **0** | **1,859** | **1,113** | **1,687** | **1,526** | **0** | **0** | **46** | **0** |
| Pentanes Plus | 0 | 0 | 0 | 0 | 103 | 0 | 0 | 0 | 718 | 0 | 0 | 47 | 105 | 0 | 0 | 0 | 0 | 0 |
| Liquefied Petroleum Gases | 0 | 0 | 0 | 851 | 3,232 | 41 | 0 | 2,341 | 6,107 | 0 | 0 | 410 | 1,582 | 0 | 0 | 0 | 0 | 0 |
| Unfinished Oils | 0 | 0 | 0 | 0 | 74 | 0 | 0 | 220 | 351 | 0 | 154 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Blending Components | | | | | | | | | | | | | | | | | | |
| Motor Gasoline | 41 | 47 | 0 | 128 | 0 | 0 | 0 | 166 | 52 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Aviation Gasoline | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Finished Motor Gasoline | 4,759 | 0 | 0 | 1,870 | 1,540 | 726 | 0 | 42,809 | 11,870 | 0 | 955 | 398 | 0 | 1,110 | 0 | 0 | 0 | 0 |
| Finished Leaded Motor Gasoline | 795 | 0 | 0 | 133 | 388 | 160 | 0 | 4,928 | 1,582 | 0 | 292 | 136 | 0 | 400 | 0 | 0 | 0 | 0 |
| Finished Unleaded Motor Gasoline | 3,964 | 0 | 0 | 1,737 | 1,152 | 566 | 0 | 37,881 | 10,288 | 0 | 663 | 262 | 0 | 710 | 0 | 0 | 0 | 0 |
| Finished Aviation Gasoline | 20 | 0 | 0 | 0 | 0 | 17 | 0 | 149 | 98 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Naphtha-Type Jet Fuel | 0 | 0 | 0 | 0 | 86 | 0 | 0 | 207 | 1 | 0 | 263 | 24 | 0 | 91 | 0 | 0 | 0 | 0 |
| Kerosene-Type Jet Fuel | 449 | 0 | 0 | 196 | 97 | 513 | 0 | 11,989 | 3,481 | 0 | 139 | 0 | 0 | 66 | 0 | 0 | 0 | 0 |
| Kerosene | 34 | 0 | 0 | 28 | 144 | 0 | 0 | 555 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Distillate Fuel Oil | 2,131 | 0 | 0 | 444 | 314 | 152 | 0 | 17,175 | 5,365 | 0 | 348 | 234 | 0 | 259 | 0 | 0 | 0 | 0 |
| Residual Fuel Oil | 0 | 0 | 0 | 0 | 222 | 0 | 0 | 103 | 89 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Petrochemical Feedstocks[1] | 63 | 0 | 0 | 74 | 0 | 0 | 0 | 75 | 152 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Special Naphthas | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 305 | 132 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lubricants | 0 | 88 | 0 | 117 | 45 | 0 | 0 | 880 | 359 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 46 | 0 |
| Waxes | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Asphalt and Road Oil | 0 | 96 | 0 | 157 | 0 | 0 | 0 | 297 | 137 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Miscellaneous Products | 0 | 21 | 0 | 0 | 0 | 0 | 0 | 44 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | **7,497** | **252** | **0** | **3,984** | **8,419** | **2,143** | **0** | **77,695** | **77,025** | **0** | **1,859** | **7,014** | **3,849** | **1,526** | **934** | **0** | **14,638** | **0** |

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[1] Includes naphtha less than 400 degrees F endpoint and other oils equal to or greater than 400 degrees F endpoint.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 27. Movements of Crude Oil and Petroleum Products by Pipeline Between PAD Districts, November 1988

(Thousand Barrels)

| Commodity | From I to | | From II to | | | From III to | | | | From IV to | | | From V to | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | II | III | I | III | IV | I | II | IV | V | II | III | V | III | IV |
| **Crude Oil** | 0 | 0 | 0 | 2,562 | 694 | 0 | 48,113 | 0 | 0 | 5,901 | 2,162 | 0 | 3,139 | 0 |
| **Petroleum Products** | 7,359 | 0 | 2,146 | 5,516 | 1,449 | 63,616 | 24,749 | 0 | 1,705 | 1,113 | 1,687 | 1,526 | 0 | 0 |
| Pentanes Plus | 0 | 0 | 0 | 103 | 0 | 0 | 718 | 0 | 0 | 47 | 105 | 0 | 0 | 0 |
| Liquefied Petroleum Gases | 0 | 0 | 851 | 3,232 | 41 | 2,085 | 6,081 | 0 | 0 | 410 | 1,582 | 0 | 0 | 0 |
| Blending Components | | | | | | | | | | | | | | |
| Motor Gasoline | 0 | 0 | 128 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Aviation Gasoline | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Finished Motor Gasoline | 4,734 | 0 | 931 | 1,540 | 726 | 35,211 | 10,332 | 0 | 955 | 398 | 0 | 1,110 | 0 | 0 |
| Finished Leaded Motor Gasoline | 795 | 0 | 27 | 388 | 160 | 4,080 | 1,253 | 0 | 292 | 136 | 0 | 400 | 0 | 0 |
| Finished Unleaded Motor Gasoline | 3,939 | 0 | 904 | 1,152 | 566 | 31,131 | 9,079 | 0 | 663 | 262 | 0 | 710 | 0 | 0 |
| Finished Aviation Gasoline | 20 | 0 | 0 | 0 | 17 | 62 | 98 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Naphtha-Type Jet Fuel | 0 | 0 | 0 | 86 | 0 | 207 | 1 | 0 | 263 | 24 | 0 | 91 | 0 | 0 |
| Kerosene-Type Jet Fuel | 449 | 0 | 122 | 97 | 513 | 10,171 | 3,119 | 0 | 139 | 0 | 0 | 66 | 0 | 0 |
| Kerosene | 34 | 0 | 0 | 144 | 0 | 520 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Distillate Fuel Oil | 2,122 | 0 | 114 | 314 | 152 | 15,360 | 4,400 | 0 | 348 | 234 | 0 | 259 | 0 | 0 |
| Residual Fuel Oil | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Miscellaneous Products | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | 7,359 | 0 | 2,146 | 8,078 | 2,143 | 63,616 | 72,862 | 0 | 1,705 | 7,014 | 3,849 | 1,526 | 3,139 | 0 |

Sources and estimation procedures. See Explanatory Notes 1 and 2

## Table 28. Movements of Crude Oil and Petroleum Products by Tanker and Barge Between PAD Districts, November 1988

(Thousand Barrels)

| Commodity | From I to | | | From II to | | | From III to | | | | | | From V to | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | II | III | V | I | III | V | I | New England | Central Atlantic | Lower Atlantic | II | V | I | II | III |
| **Crude Oil** | 0 | 0 | 0 | 119 | 0 | 0 | 380 | 0 | 380 | 0 | 0 | 0 | 934 | 0 | 11,453 |
| **Petroleum Products** | 138 | 252 | 0 | 1,719 | 341 | 0 | 13,699 | 86 | 1,903 | 11,710 | 4,163 | 154 | 0 | 0 | 46 |
| Liquefied Petroleum Gases | 0 | 0 | 0 | 0 | 0 | 0 | 256 | 0 | 0 | 256 | 26 | 0 | 0 | 0 | 0 |
| Unfinished Oils | 0 | 0 | 0 | 0 | 74 | 0 | 220 | 0 | 67 | 153 | 351 | 154 | 0 | 0 | 0 |
| Motor Gasoline Blending Components | 41 | 47 | 0 | 0 | 0 | 0 | 166 | 0 | 166 | 0 | 52 | 0 | 0 | 0 | 0 |
| Finished Motor Gasoline | 25 | 0 | 0 | 939 | 0 | 0 | 7,598 | 0 | 356 | 7,242 | 1,538 | 0 | 0 | 0 | 0 |
| Finished Leaded Motor Gasoline | 0 | 0 | 0 | 106 | 0 | 0 | 848 | 0 | 223 | 625 | 329 | 0 | 0 | 0 | 0 |
| Finished Unleaded Motor Gasoline | 25 | 0 | 0 | 833 | 0 | 0 | 6,750 | 0 | 133 | 6,617 | 1,209 | 0 | 0 | 0 | 0 |
| Finished Aviation Gasoline | 0 | 0 | 0 | 0 | 0 | 0 | 87 | 24 | 22 | 41 | 0 | 0 | 0 | 0 | 0 |
| Naphtha-Type Jet Fuel | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Kerosene-Type Jet Fuel | 0 | 0 | 0 | 74 | 0 | 0 | 1,818 | 51 | 199 | 1,568 | 362 | 0 | 0 | 0 | 0 |
| Kerosene | 0 | 0 | 0 | 28 | 0 | 0 | 35 | 11 | 24 | 0 | 0 | 0 | 0 | 0 | 0 |
| Distillate Fuel Oil | 9 | 0 | 0 | 330 | 0 | 0 | 1,815 | 0 | 282 | 1,533 | 965 | 0 | 0 | 0 | 0 |
| Residual Fuel Oil | 0 | 0 | 0 | 0 | 222 | 0 | 103 | 0 | 82 | 21 | 89 | 0 | 0 | 0 | 0 |
| Petrochemical Feedstocks[1] | 63 | 0 | 0 | 74 | 0 | 0 | 75 | 0 | 54 | 21 | 152 | 0 | 0 | 0 | 0 |
| Special Naphthas | 0 | 0 | 0 | 0 | 0 | 0 | 305 | 0 | 141 | 164 | 132 | 0 | 0 | 0 | 0 |
| Lubricants | 0 | 88 | 0 | 117 | 45 | 0 | 880 | 0 | 500 | 380 | 359 | 0 | 0 | 0 | 46 |
| Waxes | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Asphalt and Road Oil | 0 | 96 | 0 | 157 | 0 | 0 | 297 | 0 | 0 | 297 | 137 | 0 | 0 | 0 | 0 |
| Miscellaneous Products | 0 | 21 | 0 | 0 | 0 | 0 | 44 | 0 | 10 | 34 | 0 | 0 | 0 | 0 | 0 |
| **Total** | 138 | 252 | 0 | 1,838 | 341 | 0 | 14,079 | 86 | 2,283 | 11,710 | 4,163 | 154 | 934 | 0 | 11,499 |

[1] Includes naphtha less than 400 degrees F endpoint and other oils equal to or greater than 400 degrees F endpoint

Sources and estimation procedures. See Explanatory Notes 1 and 2

## Table 29. Net Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, and Barge Between PAD Districts, November 1988
(Thousand Barrels)

| Commodity | PAD District I | | | PAD District II | | | PAD District III | | | PAD District IV | | | PAD District V | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Receipts into PADD I | Shipments from PADD I | Net Receipts PADD I | Receipts into PADD II | Shipments from PADD II | Net Receipts PADD II | Receipts into PADD III | Shipments from PADD III | Net Receipts PADD III | Receipts into PADD IV | Shipments from PADD IV | Net Receipts PADD IV | Receipts into PADD V | Shipments from PADD V | Net Receipts PADD V |
| **Crude Oil** | **1,433** | **0** | **1,433** | **54,014** | **3,375** | **50,639** | **19,316** | **48,493** | **-29,177** | **694** | **8,063** | **-7,369** | **0** | **15,526** | **-15,526** |
| **Petroleum Products** | **81,180** | **7,749** | **73,431** | **37,522** | **11,171** | **26,351** | **7,842** | **108,086** | **-100,244** | **1,449** | **4,326** | **-2,877** | **3,385** | **46** | **3,339** |
| Pentanes Plus | 0 | 0 | 0 | 765 | 103 | 662 | 208 | 718 | -510 | 0 | 152 | -152 | 0 | 0 | 0 |
| Liquefied Petroleum Gases | 3,192 | 0 | 3,192 | 6,517 | 4,124 | 2,393 | 4,814 | 8,448 | -3,634 | 41 | 1,992 | -1,951 | 0 | 0 | 0 |
| Unfinished Oils | 220 | 0 | 220 | 351 | 74 | 277 | 74 | 725 | -651 | 0 | 0 | 0 | 154 | 0 | 154 |
| Blending Components | | | | | | | | | | | | | | | |
| Motor Gasoline | 294 | 88 | 206 | 93 | 128 | -35 | 47 | 218 | -171 | 0 | 0 | 0 | 0 | 0 | 0 |
| Aviation Gasoline | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Finished Motor Gasoline | 44,679 | 4,759 | 39,920 | 17,027 | 4,136 | 12,891 | 1,540 | 55,634 | -54,094 | 726 | 1,508 | -782 | 2,065 | 0 | 2,065 |
| Finished Leaded Motor Gasoline | 5,061 | 795 | 4,266 | 2,513 | 681 | 1,832 | 388 | 6,802 | -6,414 | 160 | 536 | -376 | 692 | 0 | 692 |
| Finished Unleaded Motor Gasoline | 39,618 | 3,964 | 35,654 | 14,514 | 3,455 | 11,059 | 1,152 | 48,832 | -47,680 | 566 | 972 | -406 | 1,373 | 0 | 1,373 |
| Finished Aviation Gasoline | 149 | 20 | 129 | 118 | 17 | 101 | 0 | 247 | -247 | 17 | 0 | 17 | 0 | 0 | 0 |
| Naphtha-Type Jet Fuel | 207 | 0 | 207 | 25 | 86 | -61 | 86 | 471 | -385 | 0 | 115 | -115 | 354 | 0 | 354 |
| Kerosene-Type Jet Fuel | 12,185 | 449 | 11,736 | 3,930 | 806 | 3,124 | 97 | 15,609 | -15,512 | 513 | 66 | 447 | 205 | 0 | 205 |
| Kerosene | 583 | 34 | 549 | 34 | 172 | -138 | 144 | 555 | -411 | 0 | 0 | 0 | 0 | 0 | 0 |
| Distillate Fuel Oil | 17,619 | 2,131 | 15,488 | 7,730 | 910 | 6,820 | 314 | 22,888 | -22,574 | 152 | 493 | -341 | 607 | 0 | 607 |
| Residual Fuel Oil | 103 | 0 | 103 | 89 | 222 | -133 | 222 | 192 | 30 | 0 | 0 | 0 | 0 | 0 | 0 |
| Petrochemical Feedstocks[1] | 149 | 63 | 86 | 215 | 74 | 141 | 0 | 227 | -227 | 0 | 0 | 0 | 0 | 0 | 0 |
| Special Naphthas | 305 | 0 | 305 | 132 | 0 | 132 | 0 | 437 | -437 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lubricants | 997 | 88 | 909 | 359 | 162 | 197 | 179 | 1,239 | -1,060 | 0 | 0 | 0 | 0 | 0 | 0 |
| Waxes | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 46 | -46 |
| Asphalt and Road Oil | 454 | 96 | 358 | 137 | 157 | -20 | 96 | 434 | -338 | 0 | 0 | 0 | 0 | 0 | 0 |
| Miscellaneous Products | 44 | 21 | 23 | 0 | 0 | 0 | 21 | 44 | -23 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | **82,613** | **7,749** | **74,864** | **91,536** | **14,546** | **76,990** | **27,158** | **156,579** | **-129,421** | **2,143** | **12,389** | **-10,246** | **3,385** | **15,572** | **-12,187** |

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[1] Includes naphtha less than 400 degrees F endpoint and other oils equal to or greater than 400 degrees F endpoint.

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 30. Production of Residual Fuel Oil by Sulfur Content by PAD District, November, 1988

(Thousand Barrels)

| Commodity | PAD District I | | | PAD District II | | | | PAD District III | | | | | | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | East Coast | Appalachian No.1 | Total | Ind., Ill., Ky. * | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | N. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast | |
| **Residual Fuel Oil** | **3,708** | **107** | **3,815** | **2,035** | **262** | **199** | **2,496** | **530** | **5,653** | **2,618** | **356** | **15** | **9,172** | **351** | **11,865** | **27,699** |
| 0.00 to 0.30% Sulfur | 1,019 | 20 | 1,039 | 55 | 0 | 0 | 55 | 380 | 43 | 753 | 73 | 7 | 1,256 | 36 | 1,143 | 3,529 |
| 0.31 to 1.00% Sulfur | 1,710 | 87 | 1,797 | 390 | 0 | 86 | 476 | 64 | 377 | 467 | 234 | 8 | 1,150 | 68 | 1,937 | 5,428 |
| Greater Than 1.00% Sulfur | 979 | 0 | 979 | 1,590 | 262 | 113 | 1,965 | 86 | 5,233 | 1,398 | 49 | 0 | 6,766 | 247 | 8,785 | 18,742 |

* Effective January 1987 "Appalachian No.2" is combined with "Ind., Ill., Ky.".

Sources and estimation procedures: See Explanatory Notes 1 and 2.

## Table 31. Stocks of Residual Fuel Oil by Sulfur Content by PAD District, November 30, 1988

(Thousand Barrels)

| Commodity | PAD District I | | | PAD District II | | | | PAD District III | | | | | | PAD Dist IV | PAD Dist V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | East Coast | Appalachian No 1 | Total | Ind., Ill., Ky * | Minn, Wisc, Daks | Okla, Kans, Mo | Total | Texas Inland | Texas Gulf Coast | La Gulf Coast | N La., Ark | New Mexico | Total | Rocky Mt | West Coast | |
| **Residual Fuel Oil -- 0.00 to 0.30% Sulfur** | | | | | | | | | | | | | | | | |
| Refinery | 462 | 46 | 508 | 16 | 0 | 0 | 16 | 74 | 88 | 425 | 4 | 4 | 595 | 85 | 838 | 2,042 |
| Bulk Terminal | -- | -- | 3,308 | -- | -- | -- | 291 | -- | -- | -- | -- | -- | 6 | 0 | 0 | 3,605 |
| **Total** | -- | -- | **3,816** | -- | -- | -- | **307** | -- | -- | -- | -- | -- | **601** | **85** | **838** | **5,647** |
| **Residual Fuel Oil -- 0.31 to 1.00% Sulfur** | | | | | | | | | | | | | | | | |
| Refinery | 982 | 20 | 1,002 | 357 | 0 | 56 | 413 | 13 | 523 | 163 | 209 | 2 | 910 | 264 | 1,184 | 3,773 |
| Bulk Terminal | -- | -- | 5,560 | -- | -- | -- | 330 | -- | -- | -- | -- | -- | 2,893 | 0 | 1,449 | 10,232 |
| **Total** | -- | -- | **6,562** | -- | -- | -- | **743** | -- | -- | -- | -- | -- | **3,803** | **264** | **2,633** | **14,005** |
| **Residual Fuel Oil -- Greater than 1.00% Sulfur** | | | | | | | | | | | | | | | | |
| Refinery | 1,047 | 0 | 1,047 | 1,396 | 193 | 124 | 1,713 | 95 | 3,437 | 1,831 | 40 | 0 | 5,403 | 278 | 4,191 | 12,632 |
| Bulk Terminal | -- | -- | 7,226 | -- | -- | -- | 625 | -- | -- | -- | -- | -- | 2,686 | 0 | 2,144 | 12,681 |
| **Total** | -- | -- | **8,273** | -- | -- | -- | **2,338** | -- | -- | -- | -- | -- | **8,089** | **278** | **6,335** | **25,313** |

* Effective January 1987 "Appalachian No 2" is combined with "Ind, Ill, Ky"

Sources and estimation procedures See Explanatory Notes 1 and 2

## Table 32. Movements of Residual Fuel Oil by Tanker and Barge Between PAD Districts, by Sulfur Content, November 1988

(Thousand Barrels)

| Commodity | From I to | | | From II to | | | From III to | | | | | | From V to | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | II | III | V | I | III | V | I | New England | Central Atlantic | Lower Atlantic | II | V | I | II | III |
| **Residual Fuel Oil** | **0** | **0** | **0** | **0** | **222** | **0** | **103** | **0** | **82** | **21** | **89** | **0** | **0** | **0** | **0** |
| 0 00 to 0 30% Sulfur | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 31 to 1 00% Sulfur | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 34 | 0 | 0 | 0 | 0 |
| Greater Than 1 00% Sulfur | 0 | 0 | 0 | 0 | 222 | 0 | 103 | 0 | 82 | 21 | 55 | 0 | 0 | 0 | 0 |

Sources and estimation procedures See Explanatory Notes 1 and 2

## Table 33. Imports of Residual Fuel Oil by Sulfur Content by Country of Origin, November 1988
(Thousand Barrels)

| Country | Residual Fuel Oil 0.00 to 0.30% | 0.31 to 1.00% | Greater Than 1.00% | Total |
|---|---|---|---|---|
| **Arab OPEC** | | | | |
| Algeria | 2,533 | 0 | 0 | 2,533 |
| Iraq | 0 | 0 | 0 | 0 |
| Kuwait | 0 | 0 | 0 | 0 |
| Libya | 0 | 0 | 0 | 0 |
| Neutral Zone | 0 | 0 | 0 | 0 |
| Qatar | 0 | 0 | 0 | 0 |
| Saudi Arabia | 0 | 0 | 274 | 274 |
| United Arab Emirates | 0 | 0 | 0 | 0 |
| Subtotal Arab OPEC | 2,533 | 0 | 274 | 2,807 |
| **Other OPEC** | | | | |
| Ecuador | 0 | 0 | 525 | 525 |
| Gabon | 0 | 0 | 0 | 0 |
| Indonesia | 0 | 0 | 0 | 0 |
| Iran | 0 | 0 | 0 | 0 |
| Nigeria | 0 | 156 | 0 | 156 |
| Venezuela | 0 | 0 | 4,148 | 4,148 |
| Subtotal Other OPEC | 0 | 156 | 4,673 | 4,829 |
| **Other** | | | | |
| Angola | 630 | 0 | 0 | 630 |
| Australia | 0 | 45 | 0 | 45 |
| Bahama Islands | 0 | 49 | 503 | 552 |
| Bolivia | 0 | 0 | 0 | 0 |
| Brazil | 304 | 0 | 0 | 304 |
| Brunei | 0 | 0 | 0 | 0 |
| Canada | 254 | 212 | 608 | 1,074 |
| China, People's Republic of | 0 | 0 | 0 | 0 |
| Congo | 0 | 0 | 0 | 0 |
| Egypt | 0 | 0 | 0 | 0 |
| France | 0 | 243 | 0 | 243 |
| Ghana | 0 | 0 | 137 | 137 |
| Liberia | 0 | 0 | 0 | 0 |
| Malaysia | 0 | 0 | 0 | 0 |
| Mexico | 0 | 0 | 752 | 752 |
| Netherlands | 0 | 0 | 0 | 0 |
| Netherlands Antilles | 0 | 767 | 361 | 1,128 |
| Norway | 0 | 0 | 0 | 0 |
| Oman | 0 | 0 | 0 | 0 |
| Peru | 0 | 204 | 1,015 | 1,219 |
| Puerto Rico | 0 | 56 | 321 | 377 |
| Romania | 0 | 0 | 0 | 0 |
| Spain | 0 | 0 | 0 | 0 |
| Syria | 0 | 0 | 158 | 158 |
| Trinidad | 0 | 0 | 152 | 152 |
| Tunisia | 0 | 0 | 0 | 0 |
| United Kingdom | 0 | 1,102 | 0 | 1,102 |
| Virgin Islands | 879 | 57 | 1,507 | 2,443 |
| Yugoslavia | 0 | 0 | 0 | 0 |
| Zaire | 0 | 0 | 0 | 0 |
| Other Western Hemisphere | 0 | 164 | 1,264 | 1,428 |

See footnotes at end of table.

## Table 33. Imports of Residual Fuel Oil by Sulfur Content by Country of Origin, November 1988 (continued)
(Thousand Barrels)

| Country | Residual Fuel Oil | | | |
|---|---|---|---|---|
| | 0.00 to 0.30% | 0.31 to 1.00% | Greater Than 1.00% | Total |
| **Other** | | | | |
| Other Eastern Hemisphere | 1,186 | 1,224 | 1,152 | 3,562 |
| Subtotal Other | 3,253 | 4,123 | 7,930 | 15,306 |
| **Total Imports** | **5,786** | **4,279** | **12,877** | **22,942** |

Note: Total may not equal sum of components due to independent rounding.
Sources and estimation procedures: See Explanatory Notes 1 and 2

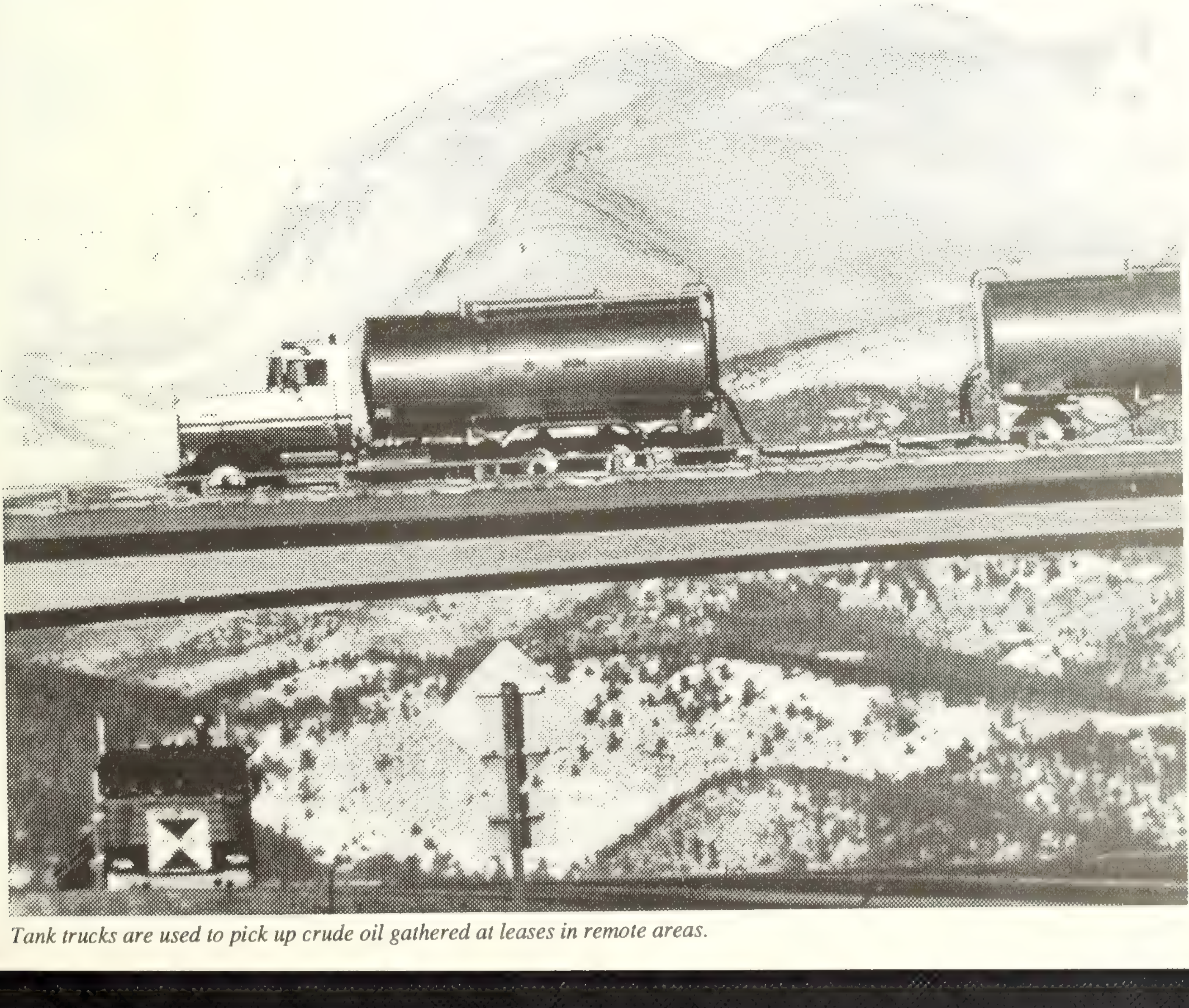
## Table 34. Imports of Residual Fuel Oil by Sulfur Content by State of Entry, November 1988
(Thousand Barrels)

| State | Residual Fuel Oil | | | |
|---|---|---|---|---|
| | 0.00 to 0.30% | 0.31 to 1.00% | Greater Than 1.00% | Total |
| **PAD District I** | **5,285** | **4,234** | **12,390** | **21,909** |
| Connecticut | 0 | 0 | 455 | 455 |
| Delaware | 0 | 0 | 344 | 344 |
| Florida | 0 | 285 | 920 | 1,205 |
| Georgia | 0 | 0 | 92 | 92 |
| Maine | 0 | 211 | 744 | 955 |
| Maryland | 0 | 140 | 667 | 807 |
| Massachusetts | 0 | 1,352 | 2,720 | 4,072 |
| New Jersey | 1,110 | 723 | 2,205 | 4,038 |
| New York | 4,175 | 1,280 | 2,557 | 8,012 |
| North Carolina | 0 | 0 | 362 | 362 |
| Pennsylvania | 0 | 0 | 608 | 608 |
| Rhode Island | 0 | 243 | 0 | 243 |
| South Carolina | 0 | 0 | 276 | 276 |
| Vermont | 0 | 0 | 7 | 7 |
| Virginia | 0 | 0 | 433 | 433 |
| **PAD District II** | **254** | **0** | **34** | **288** |
| Michigan | 254 | 0 | 1 | 255 |
| North Dakota | 0 | 0 | 33 | 33 |
| **PAD District III** | **0** | **0** | **453** | **453** |
| Alabama | 0 | 0 | 453 | 453 |
| **PAD District V** | **247** | **45** | **0** | **292** |
| Hawaii | 247 | 45 | 0 | 292 |
| **All PAD Districts** | 5,786 | 4,279 | 12,877 | 22,942 |

Note Total may not equal sum of components due to independent rounding
Sources and estimation procedures See Explanatory Notes 1 and 2

# Appendix A

## District Descriptions and Maps



*Tank trucks are used to pick up crude oil gathered at leases in remote areas.*

## Appendix A

# District Descriptions and Maps

The following are the Refining Districts which make up the Petroleum Administration for Defense (PAD) Districts.

## PAD District I

*East Coast:* District of Columbia and the States of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New Jersey, Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, Florida, and the following counties of the State of New York: Cayuga, Tompkins, Chemung, and all counties east and north thereof. Also the following counties in the State of Pennsylvania: Bradford, Sullivan, Columbia, Montour, Northumberland, Dauphin, York, and all counties east thereof.

*Appalachian No. 1:* The State of West Virginia and those parts of the States of Pennsylvania and New York not included in the East Coast District.

## PAD District II

*Indiana-Illinois-Kentucky*: The States of Indiana, Illinois, Kentucky, Tennessee, Michigan, and Ohio.

*Minnesota-Wisconsin-North and South Dakota:* The States of Minnesota, Wisconsin, North Dakota, and South Dakota.

*Oklahoma-Kansas-Missouri:* The States of Oklahoma, Kansas, Missouri, Nebraska, and Iowa.

## PAD District III

*Texas Inland:* The State of Texas except the Texas Gulf Coast District.

*Texas Gulf Coast:* The following counties of the State of Texas: Newton, Orange, Jefferson, Jasper, Tyler, Hardin, Liberty, Chambers, Polk, San Jacinto, Montgomery, Harris, Galveston, Waller, Fort Bend, Brazoria, Wharton, Matagorda, Jackson, Victoria, Calhoun, Refugio, Aransas, San Patricio, Nueces, Kleberg, Kenedy, Willacy, and Cameron.

*Louisiana Gulf Coast:* The following Parishes of the State of Louisiana: Vernon, Rapides, Avoyelles, Pointe Coupee, West Feliciana, East Feliciana, Saint Helena, Tangipahoa, Washington, and all Parishes south thereof. Also the following counties of the State of Mississippi: Pearl River, Stone, George, Hancock, Harrison, and Jackson. Also the following counties of the State of Alabama: Mobile and Baldwin.

*North Louisiana-Arkansas:* The State of Arkansas and those parts of the States of Louisiana, Mississippi, and Alabama not included in the Louisiana Gulf Coast District.

*New Mexico:* The State of New Mexico.

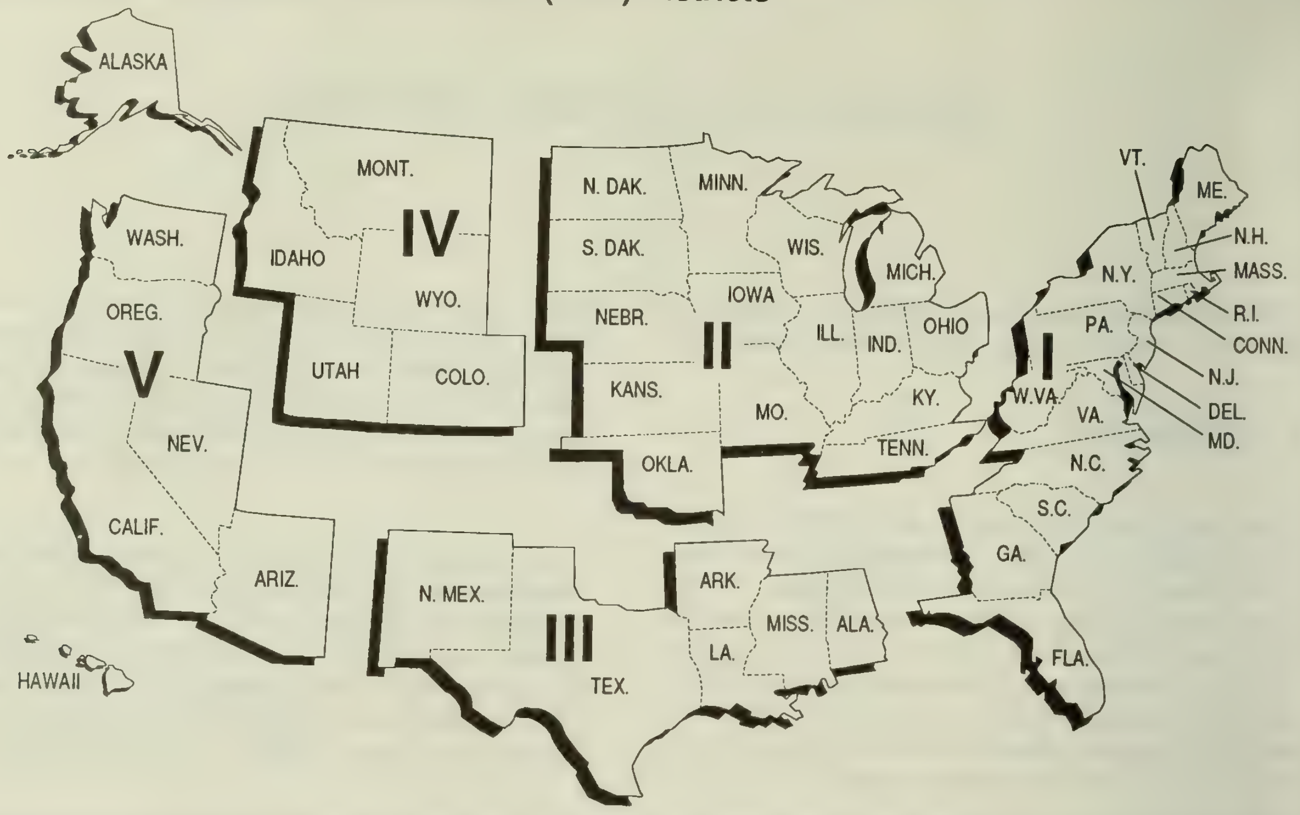
## PAD District IV

*Rocky Mountain:* The States of Montana, Idaho, Wyoming, Utah, and Colorado.

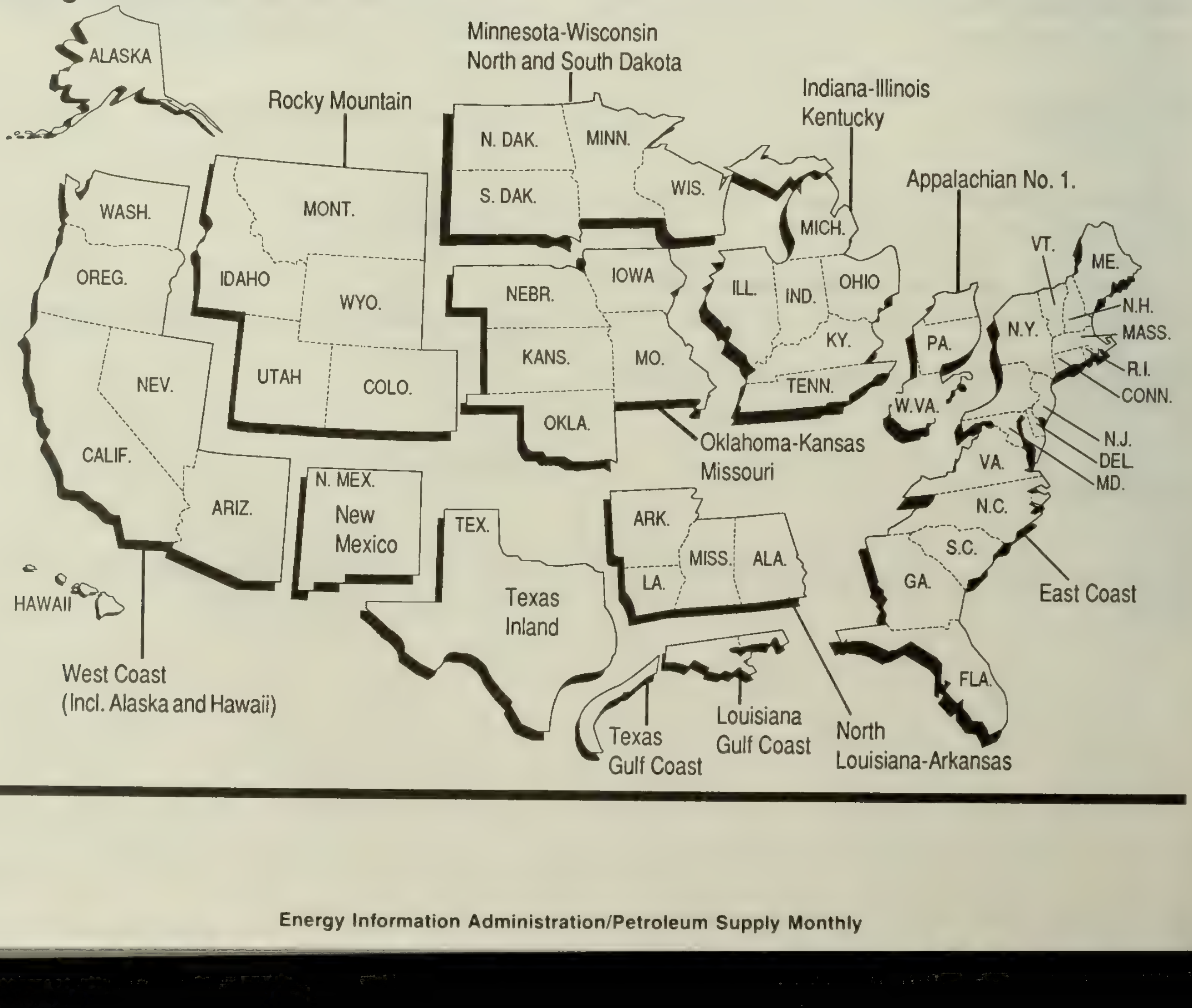
## PAD District V

*West Coast:* The States of Washington, Oregon, California, Nevada, Arizona, Alaska, and Hawaii.

## Petroleum Administration for Defense (PAD) Districts

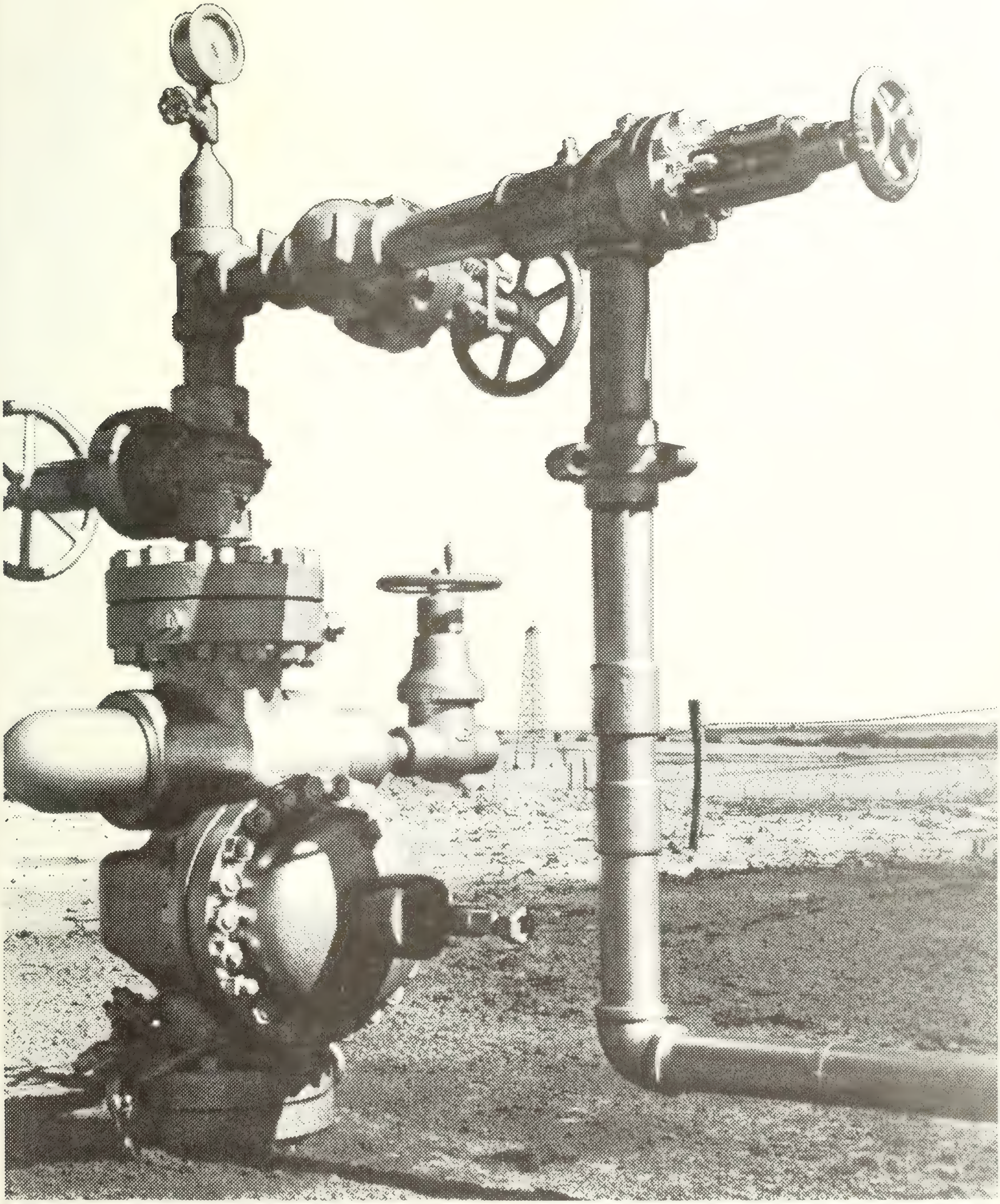


## Refining Districts



# Appendix B

## Explanatory Notes



*The cluster of pipes and valves that control the flow of oil at the mouth of an oil well is what oilmen call a "Christmas Tree."*

## Appendix B

# Explanatory Notes

## Note 1: Data Collection Methodology

### Background

The Petroleum Supply Reporting System (PSRS) represents a family of data collection survey forms, data processing systems and publication systems that have been consolidated to achieve comparability and consistency throughout. The survey forms that comprise the PSRS are:

| *Form Number* | *Name* |
|---|---|
| EIA-800 | Weekly Refinery Report |
| EIA-801 | Weekly Bulk Terminal Report |
| EIA-802 | Weekly Product Pipeline Report |
| EIA-803 | Weekly Crude Oil Stocks Report |
| EIA-804 | Weekly Imports Report |
| EIA-810 | Monthly Refinery Report |
| EIA-811 | Monthly Bulk Terminal Report |
| EIA-812 | Monthly Product Pipeline Report |
| EIA-813 | Monthly Crude Oil Report |
| EIA-814 | Monthly Imports Report |
| EIA-816 | Monthly Natural Gas Liquids Report |
| EIA-817 | Monthly Tanker and Barge Movement Report |
| EIA-820 | Annual Refinery Report |

Forms EIA-800 through 804 comprise the Weekly Petroleum Supply Reporting System (WPSRS). This system is designed to collect weekly data on basic refinery operations and on crude oil and major petroleum products stocks and imports. Data from the WPSRS are published in the *Weekly Petroleum Status Report* (WPSR) and are also used to calculate the preliminary statistics in the "Summary Statistics" section of the *Petroleum Supply Monthly* (PSM). A description of the WPSRS survey forms follows in Explanatory Note 1.1.

Forms EIA-810 through 814, 816, and 817 comprise the Monthly Petroleum Supply Reporting System (MPSRS). These surveys collect detailed refinery and natural gas plant operations data; refinery, bulk terminal, natural gas plant, and pipeline stocks data; crude oil and petroleum product imports data; and data on movements of petroleum products and crude oil between Petroleum Administration for Defense (PAD) Districts. These surveys are the primary source of data for the "Summary Statistics" and "Detailed Statistics" sections of the PSM. A description of MPSRS survey forms follows in Explanatory Note 1.2.

Data are also obtained on magnetic tape from the Bureau of the Census on a monthly basis. These tapes contain aggregated import and export statistics that are used in the preparation of the PSM. A description of the Census data follows in Explanatory Note 1.3.

## Note 1.1: Weekly Petroleum Supply Reporting System (WPSRS)

### Background

The EIA first began publishing weekly petroleum supply statistics in April 1979 using data from an external source. Estimates from the EIA's weekly sample surveys (inaugurated in April 1979) replaced the estimates from the external source for all but the imports series in January 1980, and replaced the imports estimates in June 1980.

The weekly surveys collect data comparable to those collected on a monthly basis. Selected petroleum companies report weekly data to the EIA on crude oil and petroleum product stocks, refinery inputs and production, and crude oil and petroleum product imports. On Forms EIA-800 through EIA-803, companies report data on a custody basis. On the Form EIA-804, the importer of record reports all shipments entering the United States. Current weekly data and the most recent monthly data are used to estimate the totals that are published in the *Weekly Petroleum Status Report*.

### Sample Frame

The sample of companies that report weekly is selected from the universe of companies that report on the comparable monthly surveys. Sampled companies report data only for facilities in the 50 States and District of Columbia.

The sample for each survey is taken from the following universe:

**EIA-800**: Based on the EIA-810 universe which includes all petroleum refineries and blending plants located in the 50 States, District of Columbia, Puerto Rico, the Virgin Islands, and Guam. The selected sample size is 151.

**EIA-801**: Based on the EIA-811 universe which includes every bulk terminal operating in the 50 States, the District of Columbia, Puerto Rico, and the Virgin Islands. A bulk terminal is primarily used for storage and/or marketing of petroleum products and has a total bulk storage capacity of 50,000 barrels or more, and/or receives petroleum products by tanker, barge, or pipeline. Bulk terminal facilities associated with a product pipeline are included. The selected sample size is 70.

**EIA-802**: Based on the EIA-812 universe which includes all product pipeline companies that carry petroleum products (including interstate, intrastate, and intracompany pipelines) in the 50 States and the District of Columbia. The selected sample size is 41.

**EIA-803**: Based on the EIA-813 universe which includes companies that carry or store 1,000 barrels or more of crude oil. Included in this survey are gathering and trunk pipeline companies (including interstate, intrastate, and intracompany pipelines), crude oil producers, terminal operators, storers of crude oil (except refineries), and companies transporting Alaskan crude oil by water in the 50 States and the District of Columbia. The selected sample size is 80.

**EIA-804**: Based on the EIA-814 universe which covers each company, including subsidiary or affiliated companies, that import crude oil, unfinished oils, and finished petroleum products into the United States and Puerto Rico. The selected sample size is 103.

### Sampling Method

The sampling procedure used for the weekly system is the cut-off method. In the cut-off method, companies are ranked from largest to smallest on the basis of the quantities reported during some previous period. Companies are chosen for the sample beginning with the largest and adding companies until the total sample covers about 90 percent of the total for each item and each geographic region for which weekly data are published.

### Collection Methods

Data are collected by mail, mailgram, telephone, Telex, and Telefax on a weekly basis. The report period begins and ends each Friday at 7 a.m. All canvassed firms must file reports by 5 p.m. on the following Monday.

### Estimation and Imputation

After company reports have been checked and entered into the weekly data base, weekly totals for given products are estimated by using the following formula.

The total reported by all companies for the most recent month, $(M_t)$, is divided by the amount reported by the sample of companies for the most recent month, $(M_s)$. The result is multiplied by the amount reported by the sample of companies for the current week, $(W_s)$. The answer, $W_t$, is an estimate of the amount that would have been reported by all companies for the current week if all companies reported each week.

$$W_t = \frac{M_t}{M_s} (W_s)$$

This procedure is used to estimate total weekly refinery inputs and production.

To estimate stocks of finished products, the preceding procedure is followed separately for refineries, bulk terminals, and pipelines. Total estimates are formed by summing over establishment types.

Weekly imports data are highly variable on a company-by-company basis or a week-by-week basis. Therefore, an exponentially smoothed ratio has been developed. The estimate of weekly imports is the sum of the smoothed ratios multiplied by the weekly values and estimates for shipments from Puerto Rico. Imports of other oils includes an adjustment from Census data for selected products because of coverage differences between the monthly imports data and Census data.

Explicit imputation is done for companies which do not respond in a given week. The imputed values are exponentially smoothed means of recent reports from the specific company.

### Response Rate

The response rate for the published estimates is usually between 97 and 100 percent of the sampled respondents.

## Note 1.2: Monthly Petroleum Supply Reporting System (MPSRS)

### Background

The MPSRS was implemented in January 1983 as the result of an extensive effort to integrate the collection and processing of petroleum supply data that have been collected on other

survey forms for many years. The collection of monthly petroleum supply statistics began as early as 1918 when the Bureau of Mines (BOM) began collecting data on refinery operations and crude oil stocks and movements. The collection systems were further expanded to include natural gas plant liquids production and storage in 1925, imports of crude oil and petroleum products and storage and movement of petroleum products in 1959, and tanker and barge movements of crude oil and petroleum products in 1964. Since their inception, each survey has undergone numerous changes, but the MPSRS is the first effort to make them all consistent and comparable.

### Respondent Frame

**EIA-810**: All petroleum refineries and blending plants located in the 50 States, District of Columbia, Puerto Rico, the Virgin Islands, and Guam. Approximately 260 respondents report on the EIA-810.

**EIA-811**: Every bulk terminal operating in the 50 States, the District of Columbia, Puerto Rico, and the Virgin Islands. A bulk terminal is primarily used for storage and/or marketing of petroleum products and has a total bulk storage capacity of 50,000 barrels or more, and/or receives petroleum products by tanker, barge, or pipeline. Bulk terminal facilities associated with a product pipeline are included. Approximately 320 respondents report on the EIA-811.

**EIA-812**: All product pipeline companies that carry petroleum products (including interstate, intrastate, and intracompany pipelines) in the 50 States and the District of Columbia. Approximately 90 respondents report on the EIA-812.

**EIA-813**: All companies which carry or store 1,000 barrels or more of crude oil. Included in this survey are gathering and trunk pipeline companies (including interstate, intrastate, and intracompany pipelines), crude oil producers, terminal operators, storers of crude oil (except refineries), and companies transporting Alaskan crude oil by water in the 50 States and the District of Columbia. Approximately 180 respondents report on the EIA-813.

**EIA-814**: All companies, including subsidiary or affiliated companies, that import crude oil, unfinished oils, and finished petroleum products into the United States and Puerto Rico. Approximately 1,500 respondents report on the EIA-814.

**EIA-816**: All facilities that extract liquid hydrocarbons from a natural gas stream (natural gas processing plant) and/or separate a liquid hydrocarbon stream into its component products (fractionator). Approximately 1,050 respondents report on the EIA-816.

**EIA-817**: All companies that have custody of crude oil or petroleum products transported by tanker or barge between PAD Districts or between the Panama Canal and the United States. For purposes of this report, custody is defined as physical possession of crude oil or petroleum products on a company owned tanker or barge. Also, companies which lease vessels or contract for the movement of crude oil or petroleum products on a tanker or barge between PAD Districts or between the Panama Canal and the United States are considered to have custody. Approximately 50 respondents report on the EIA-817.

EIA utilizes a number of sources and methods to maintain the survey respondent lists. On a regular basis, survey managers review industry publications such as the *Oil and Gas Journal* and *Oil Daily* for information on facilities or companies starting up or closing down operations. These sources are augmented by articles in newspapers, letters from respondents indicating changes in status and information received from survey systems operated by other offices.

Every three years an extensive survey is conducted to completely refresh the frames. This involves consolidating information from every known source including State agencies, Federal agencies (e.g., EPA, Corps of Engineers, Census Bureau, etc.), and private industry directories. The effort also includes the evaluation of the impact of potential frame changes on the historical time series of data published from these respondents. The results of this frame study are usually implemented in January to provide a full year under the same frame.

### Collection Methods

The data for all of the MPSRS surveys are collected monthly. Completed forms are required to be postmarked by the 20th calendar day following the end of the report month, with the exception of the EIA-814 which is due 15 work days following the end of the report month. Telephone follow-up calls are made to nonrespondents prior to the publication deadline, for their data. An automated mailing list is maintained and is used to monitor receipt of the forms.

### Imputing Missing Data

Imputation is performed for companies that do not respond to EIA Forms 810-813 and 816. For such companies, previous monthly values are used for current values. The previous month's ending stocks value is used for both the current month's beginning stocks and the current month's ending stocks. Data for nonrespondents on the EIA-814 and 817 are not imputed.

### Response Rate

The response rate is generally 99 to 100 percent by the time the data are first published. Nonrespondents are contacted in

writing and reminded of their requirement to report. Companies that file late or fail to file are subject to criminal fines, civil penalties, and other sanctions as provided by Section 13(i) of the FEA Act.

## Note 1.3: Census Import (IM-145) and Export (EM-522 and EM-594) Data

### Background

Each month the EIA purchases magnetic tapes of aggregated import and export statistics from the Bureau of the Census. These data tapes are the only source of export statistics and are used to augment the import data collected by the EIA.

### Import Statistics (IM-145)

### Coverage

Census import statistics used in the PSM reflect both government and nongovernment imports of merchandise from foreign countries and U.S. possessions into the United States (the 50 States and the District of Columbia) without regard to whether or not a commercial transaction is involved. The following types of transactions are excluded from the statistics:

1. Merchandise in-transit through the United States, when documented with Customs as an in-transit movement.
2. U.S. merchandise that was held in foreign countries by the U.S. Armed Forces and is returned to the United States for the use of the Armed Forces.

### Source of Import Information

The official U.S. import statistics are compiled by the Bureau of the Census from copies of the import entry and warehouse withdrawal forms that importers are required by law to file with Customs officials (Customs Forms 7501, 7505, and 7506).

### Country and Area of Origin

The country reported in the statistics as the country of origin is defined as the country where the merchandise was grown, mined, or manufactured. In instances where the country of origin cannot be determined, the transactions are credited to the country of shipment.

### Export Statistics (EM-522 and EM-594)

Census export statistics used in the PSM reflect both government and nongovernment exports of domestic and foreign merchandise from the United States (the 50 States and the District of Columbia) to foreign countries and U.S. possessions, without regard to whether or not the exportation involves a commercial transaction. The following types of transactions are excluded from the statistics:

1. Merchandise shipped in-transit through the United States from one foreign country to another, when documented as such with U.S. Customs.
2. Bunker fuels and other supplies and equipment for use on departing vessels, planes, or other carriers engaged in foreign trade.

### Source of Export Information

The official U.S. export statistics are compiled by the Bureau of the Census. Exporters are required to file export documents with Customs officials (Customs Form 7525).

### Country and Area of Destination

The country of destination is defined as the country of ultimate destination or the country where the goods are to be consumed, further processed, or manufactured, as known to the shipper at the time of exportation. If the shipper does not know the country of ultimate destination, the shipment is credited to the last country to which the shipper knows that the merchandise will be shipped in the same form as it was when exported.

## Note 2: Supply

The components of petroleum supply are field production, refinery production, imports, and stock withdrawal or addition:

**Field Production** is the sum of crude oil production (including lease condensate), natural gas processing plant production, and new supply (field production) of other liquids used by refineries.

Crude oil production is estimated based on data received from State conservation agencies. For further explanation, see Explanatory Note 3.

Field production of natural gas plant liquids (NGPL), including finished petroleum products, is reported monthly on survey Form EIA-816, *Monthly Natural Gas Liquids Report*. Negative production will occur when the amount of a product produced during the month is less than the amount of that same product that is reprocessed (input) or reclassified to become another product during the same month. For survey descriptions and other details, see Explanatory Note 1.2.

**Refinery Production** of petroleum products is reported monthly on survey Form EIA-810, *Monthly Refinery Report*. Published production of these products equals refinery production minus refinery input. Refinery production of unfinished oils and of motor and aviation gasoline blending components appears on a net basis under refinery input. Negative production will occur when the amount of a product produced during the month is less than the amount of that same product that is reprocessed (input) or reclassified to become another product during the same month.

**Imports** of crude oil and petroleum products are reported monthly on Form EIA-814, *Monthly Imports Report*. In addition, imports of NGL's are obtained from the Census Bureau Tabulation IM-145. The Census Bureau Tabulation IM-145 summarizes import data from Customs import declarations reported on Customs Forms 7501, 7505, and 7506. Additional data taken from the IM-145 are relatively small quantities of naphtha-type and kerosene-type jet fuels, distillate fuel oils, and residual fuel oils withdrawn from bonded storage for use in international trade. Even though these duty-free fuels are stored on United States shores, they did not enter the United States for domestic consumption and therefore are not included in the Form EIA-814 reporting system.

**Stock Withdrawal (+) or Addition (-)** is calculated by subtracting stocks at the end of the month from stocks at the beginning of the same month. (Note: The beginning stocks of one month are equal to the ending stocks of the previous month.) A positive result (+) would represent a withdrawal from stocks. A negative result (-) would represent a buildup of stocks. For a description of survey forms used to make stock withdrawal or addition calculations, see Explanatory Note 5.

**Unaccounted-for Crude Oil** is a balancing item that represents the difference between crude oil supply and disposition. Crude oil supply is the sum of field production, imports, and stock withdrawals. Crude oil disposition is the sum of exports, refinery input, losses, stock additions, and product supplied. Unaccounted-for crude oil is calcuated by subtracting crude oil supply from crude oil disposition. A positive result indicates that refiners and exporters reported use of more crude oil than was reported to have been available to them. (This occurs, for example, when imports are undercounted due to late reporting or other problems.) A negative result would indicate that more crude oil was reported to have been supplied to refiners and exporters than they reported used.

## Note 3: Domestic Crude Oil Production

Data on crude oil production for States are reported to the Energy Information Administration (EIA) by State government agencies. Data on crude oil production for Federal offshore areas are reported to EIA by the Minerals Management Service of the U. S. Department of the Interior, and the Conservation Committee of California Oil Producers. Currently, all except four of the producing states (Michigan, New York, Ohio, and Pennsylvania) report production data on a monthly basis. These four States report production on an annual basis. Estimates of monthly production for these four States are made by EIA using data reported on Form EIA-182, "Domestic Crude Oil First Purchase Report." After the end of each calendar year, the monthly production estimates are updated using annual reports of the State agencies and the Minerals Management Service.

Table 11 of this publication provides estimates of crude oil production in the latest month for which most State production data are available. There is a time lag of approximately 4 months between the end of the production month and the time when most monthly State crude oil production data become available. In order to present more timely crude oil production estimates, EIA prepares an original, forecasted estimate on the first day of the production month. Approximately 75 days later, this original estimate of monthly crude oil production is replaced by State level interim estimates. The State level interim estimates are based on: (a) data reported by the state (for example, production data for Alaska are typically reported to EIA before the interim estimate is made); (b) first purchase data reported on Form EIA-182; (c) exponential or hyperbolic curve fitted projections based on recent State data; or (d) constant level projections based on the average production rate during a recent time period.

Table B1 is intended to provide further insight into EIA's estimates of monthly U.S. crude oil production. It shows: (a) how the aggregate of reported State data evolves over a period of 18 months; (b) the number of producing States that have not reported production for a given month within that period; and (c) various EIA estimates of monthly crude oil production within that period:

- The original estimate is used in the *Weekly Petroleum Status Report*, and in the *Petroleum Supply Monthly* Tables S1 and S2 until replaced by the interim estimate.

- The interim estimate is used in the *Petroleum Supply Monthly* Tables 1 through 10, and in Tables S1 and S2 until replaced by the final estimate.

- The initial estimate based upon first purchase data collected on Form EIA-182 is used as an estimation tool in

generating the interim estimate. The initial volume represents the best estimate available 40 days after the end of the production month and includes imputation for nonresponse and possible reporting errors. The revised volume is the best estimate available 70 days after the end of the production month and includes imputation as needed. A final revision is published concurrent with publication of EIA-182 price data in the *Petroleum Marketing Annual.*

- The final estimate is published in the *Petroleum Supply Annual.*

## Table B1. U.S. Crude Oil[1] Production Estimates and Reported State[2] Data by Month
(Thousand Barrels per Day)

| Date of Data Availability | 8-87 | 9-87 | 10-87 | 11-87 | 12-87 | 1-88 | 2-88 | 3-88 | 4-88 | 5-88 | 6-88 | 7-88 | 8-88 | 9-88 | 10-88 | 11-88 | 12-88 | 1-89 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Reported State Data[3] | | | | | | | | | | | | | | | | | |
| 9-14-87 | 0 | | | | | | | | | | | | | | | | | |
| 10-14-87 | 1997 | 0 | | | | | | | | | | | | | | | | |
| 11-14-87 | 2971 | 1945 | 0 | | | | | | | | | | | | | | | |
| 12-14-87 | 7724 | 5008 | 2088 | 0 | | | | | | | | | | | | | | |
| 1-14-88 | 7731 | 7252 | 4866 | 2152 | 0 | | | | | | | | | | | | | |
| 2-14-88 | 8034 | 8039 | 7703 | 5296 | 2127 | 0 | | | | | | | | | | | | |
| 3-14-88 | 8071 | 8039 | 8190 | 8205 | 3208 | 2086 | 0 | | | | | | | | | | | |
| 4-14-88 | 8093 | 8090 | 8249 | 8286 | 8204 | 5111 | 2161 | 0 | | | | | | | | | | |
| 5-14-88 | 8210 | 8205 | 8365 | 8401 | 8318 | 7156 | 5743 | 2151 | 0 | | | | | | | | | |
| 6-14-88 | 8210 | 8206 | 8365 | 8403 | 8318 | 8086 | 8103 | 5767 | 2095 | 0 | | | | | | | | |
| 7-14-88 | 8210 | 8206 | 8365 | 8403 | 8319 | 8079 | 8183 | 7270 | 2686 | 2087 | 0 | | | | | | | |
| 8-14-88 | 8212 | 8217 | 8379 | 8411 | 8330 | 8134 | 8198 | 8142 | 7188 | 4859 | 2051 | 0 | | | | | | |
| 9-14-88 | 8212 | 8217 | 8380 | 8412 | 8331 | 8134 | 8240 | 8142 | 8129 | 7968 | 5005 | 2032 | 0 | | | | | |
| 10-14-88 | 8217 | 8222 | 8384 | 8416 | 8335 | 8134 | 8249 | 8184 | 8131 | 8059 | 7904 | 5083 | 2128 | 0 | | | | |
| 11-14-88 | 8217 | 8222 | 8384 | 8415 | 8335 | 8134 | 8240 | 8185 | 8134 | 8061 | 7995 | 7710 | 5081 | 2105 | 0 | | | |
| 12-14-88 | 8217 | 8222 | 8384 | 8416 | 8335 | 8134 | 8241 | 8185 | 8174 | 8099 | 7996 | 7775 | 7808 | 4957 | 2098 | 0 | | |
| 1-14-89 | 8217 | 8222 | 8384 | 8416 | 8335 | 8135 | 8242 | 8186 | 8175 | 8099 | 7997 | 7776 | 7809 | 7231 | 4770 | 2051 | 0 | 0 |
| | Producing States Without Reported Monthly Production[4] | | | | | | | | | | | | | | | | | |
| 1-14-89 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 5 | 5 | 5 | 6 | 7 | 7 | 8 | 18 | 30 | 33 | 33 |

| Type of Estimate | 8-87 | 9-87 | 10-87 | 11-87 | 12-87 | 1-88 | 2-88 | 3-88 | 4-88 | 5-88 | 6-88 | 7-88 | 8-88 | 9-88 | 10-88 | 11-88 | 12-88 | 1-89 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Production Estimate | | | | | | | | | | | | | | | | | |
| Original[5] | 8204 | 8162 | 8281 | 8283 | 8348 | 8395 | 8353 | 8306 | 8269 | 8240 | 8210 | 8189 | 8128 | 8147 | 8085 | 8026 | 8035 | 8021 |
| Interim[6] | 8190 | 8190 | 8293 | 8330 | 8340 | 8245 | 8376 | 8347 | 8268 | 8203 | 8158 | 8059 | 8063 | 7900 | 7974 | 7985 | | |
| Form EIA-182 | | | | | | | | | | | | | | | | | | |
| Initial | 8022 | 8110 | 8151 | 8162 | 8144 | 8017 | 8239 | 8138 | 8106 | 8009 | 8045 | 7853 | 7895 | 7752 | 7797 | 7821 | | |
| Revised | 8032 | 8084 | 8153 | 8173 | 8180 | 8048 | 8206 | 8134 | 8099 | 8015 | 8044 | 7839 | 7896 | 7755 | 7798 | | | |
| Final[7] | 8210 | 8205 | 8364 | 8397 | 8318 | | | | | | | | | | | | | |

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[1] Includes lease condensate.

[2] Includes Federal offshore areas, Gulf of Mexico (PAD District III) and Pacific (PAD District V), as two separate reporting entities.

[3] Includes EIA prorated monthly production in 1987 (annual average of 115 thousand barrels per day) for four States (Michigan, New York, Ohio, and Pennsylvania) for which only annual State data are available.

[4] Michigan, New York, Ohio, and Pennsylvania are counted as having monthly reported data in 1987 after their annual reports were received. These data were first reported as of 5-14-88.

[5] Original estimates were made on the first of each month.

[6] Interim estimates were made 44 days after the end of the production month.

[7] Published in the *Petroleum Supply Annual* 1987 DOE/EIA 0340(87)/2.

## Note 4: Disposition

The components of petroleum disposition are crude oil losses, refinery inputs, exports, and products supplied for domestic consumption.

**Crude Oil Losses** is the sum of crude oil losses at refineries reported for all refineries on Form EIA-810, *Monthly Refinery Report.*

**Refinery Inputs** of crude oil, natural gas plant liquids, and other liquids are reported monthly on survey Form EIA-810, *Monthly Refinery Report.* Published inputs of unfinished oils and of motor and aviation gasoline blending components equal refinery input minus refinery output. Refinery inputs of finished petroleum products are reported on a net basis under refinery production.

**Exports** of crude oil and petroleum products are compiled from Census Bureau tabulations EM-522 and EM-594. Exports include crude oil shipments to Puerto Rico, and the Virgin Islands, which are obtained from refinery receipts reported on Form EIA-810, *Monthly Refinery Report,* by refineries located in these places.

**Product Supplied** for each product is calculated by summing field production plus refinery production, plus imports, plus stock withdrawal or minus stock addition, minus crude oil losses (plus net receipts when calculated on a PAD District basis), minus refinery input, minus exports. This formula ensures that total disposition equals total supply.

Product supplied indicates those quantities of petroleum products supplied for domestic consumption. Occasionally, the result for a product is negative because total disposition of the product exceeds total supply. Negative product supplied may occur for a number of reasons: (1) product reclassification has not been reported; (2) data were misreported or reported late; (3) in the case of calculations on a PAD District basis, the figure for net receipts was inaccurate because the coverage of interdistrict movements was incomplete; and (4) products such as gasoline blending components and unfinished oils have entered the primary supply channels with their production net having been reported, e.g., streams returned to refineries from petrochemical plants.

Product supplied for crude oil is the sum of crude oil burned on leases and by pipelines as fuel oil. These data are reported on Form EIA-813, *Monthly Crude Oil Report.* Prior to January 1983, crude oil burned on leases and by pipelines as fuel oil were reported as either distillate or residual fuel oil and included in product supplied for these products.

## Note 5: Stocks

Primary stocks of crude oil are the sum of ending stocks reported monthly on Form EIA-810, *Monthly Refinery Report,* and on Form EIA-813, *Monthly Crude Oil Report.* Crude oil held in the Strategic Petroleum Reserve is included unless otherwise noted. Alaskan crude oil in-transit is also included. Primary stocks of petroleum products are summed from data reported on Form EIA-816, *Monthly Natural Gas Liquids Report*, Form EIA-810, *Monthly Refinery Report,* Form EIA-811, *Monthly Bulk Terminal Report*, and on Form EIA-812, *Monthly Product Pipeline Report.* Primary stocks of petroleum products do not include either secondary stocks held by dealers and jobbers or tertiary stocks held by consumers. For survey descriptions and other details, see Explanatory Note 1.2.

## Note 6: Average Stock Levels

The national inventory (stocks) graphs for total petroleum products, crude oil, motor gasoline, distillate fuel oil, residual oil, and liquefied petroleum gases, in this publication include features to assist in comparing current inventory levels with past inventory levels and minimum operating levels are described below.

The graphs displaying inventory levels of crude oil and petroleum products, crude oil, motor gasoline, distillate fuel oil, residual fuel oil, and liquefied petroleum gases, provide the reader with actual inventory data compared to an *average range* from the most recent 3-year period running from January through December or from July through June. The ranges are updated every six months in April and October. The 3-year period is adjusted by dropping the oldest 6 months and including the most recent 6 months. The ranges also reflect seasonal variation determined from a longer time period. The seasonal factors, which determine the shape of the upper and lower curves, are updated annually in October, using the most recent year's final monthly data.

The monthly seasonal factors are estimated by means of a seasonal adjustment technique developed at the Bureau of the Census (Census X-11). The seasonal factors are assumed to be stable (i.e., unchanging from year to year) and additive (i.e., the series is deseasonalized by subtracting the seasonal factor for the appropriate month from the report inventory levels). The intent of deseasonalization is to remove only annual variation from the data. Thus, a deseasonalized series would contain the same trends, cyclical components, and irregularities as the original data. The seasonal factors for distillate fuel oil, residual fuel oil, and liquefied petroleum gases, were derived using monthly data from 1979-1985.

After seasonal factors are derived, data from the most recent 3-year period (January-December or July-June) are deseasonalized. The average of the deseasonalized 36-month series determines the midpoint of the deseasonalized average band. The standard deviation of the deseasonalized 36-months is calculated adjusting for extreme data points. The upper curve of the average range is defined as the average plus the seasonal factors plus the standard deviation. The lower curve is defined as the average plus the seasonal factors minus the standard deviation. Thus, the width of the *average range* is twice the standard deviation.

## Note 7: Movements

Movements of crude oil between PAD Districts are reported on Form EIA-817, *Monthly Tanker and Barge Movement Report*, and on Form EIA-813, *Monthly Crude Oil Report*. Petroleum product movements are reported on Form EIA-817, *Monthly Tanker and Barge Movement Report*, and EIA-812, *Monthly Product Pipeline Report*. Net receipts is the difference between total movements into and total movements out of each PAD District by pipeline, tanker, and barge. For survey descriptions and other details, see Explanatory Note 1.2.

## Note 8: Preliminary Monthly Statistics

Weekly data (Forms EIA-800, 801, 802, 803, and 804) are used to estimate the most recent monthly values for the "Summary Statistics" section. Since some of the weekly reporting periods overlap two adjacent months, it is necessary to use weighting factors in the calculation of the monthly values.

To estimate crude oil and petroleum product imports, crude oil input to refineries and production of petroleum products for a specific month, the weekly estimates are weighted by the number of days of that month included in each week, then summed.

End-of-month stock levels of crude oil and the major products (motor gasoline, distillate fuel oil, and residual fuel oil) are calculated in a similar manner, but use only the two weekly reporting periods that cover the end-of-week stocks before and after the end of the month. The end-of-month stock level is calculated by first calculating the stock change between the two weeks. The daily stock change between the two end-of-week stock levels is then calculated. This number is multiplied by the weighting factor of the earlier of the two weeks (the week that covers the last day of the month of interest). This change is added to the earlier of the two end-of-week stock levels to estimate the end-of-month stock level.

Preliminary monthly estimates of domestic crude oil production are calculated as described in Explanatory Note 3.

## Note 9: Notes on Tables

**Note 9.1 Crude Oil and Petroleum Products Overview** statistics on the referenced line appear in Table 4 of the "Detailed Statistics," except where noted.

- Crude Oil and Petroleum Products Stock Withdrawal (+) or Addition (-), Petroleum Products Supplied, Total Imports, Crude Oil Imports, Total Exports, and Crude Oil Exports appear as labeled in Table 4. Total Production and Crude Oil Production appear under Field Production in Table 4.
- Natural Gas Plant Production is the sum of Natural Gas Liquids and Finished Petroleum Products Field Production in Table 4.
- Petroleum Products Imports is the sum of Natural Gas Liquids and LRGs, Other Liquids, and Finished Petroleum Products Imports in Table 4.
- Total Crude Oil and Petroleum Products Ending Stocks appear in thousand barrels in Table 2.

**Note 9.2 Crude Oil Supply and Disposition.** statistics on the referenced line appear in Table 1 of the "Detailed Statistics," except where noted.

- Total Domestic Field Production, Alaskan Field Production, SPR Imports, Other Imports (synonymous with Gross Imports Excl. SPR), SPR and Other Primary Stocks Withdrawal (+) or Addition (-), Unaccounted for Crude Oil, Refinery Inputs, and Exports appear as labeled in Table 1.
- Crude Losses and Product Supplied appear as labeled in Table 4.
- SPR Ending Stocks and Other Primary Ending Stocks (synonymous with stocks excluding SPR) appear in thousand barrels in Table 1.
- Total Crude Oil Ending Stocks appear in thousand barrels in Table 2.
- Total Imports appear in Table 4.

**Note 9.3 Finished Motor Gasoline Supply and Disposition** statistics on the referenced line appear in Table 4 of the "Detailed Statistics," except where noted.

- Total Production is the sum of Field Production and Refinery Production in Table 4.

- Imports, Stock Withdrawal (+) or Addition (-), Exports, and Product Supplied appear as labeled in Table 4.

- Unleaded Percent of Total Product Supplied represents the ratio of finished unleaded motor gasoline product supplied to total finished motor gasoline product supplied, multiplied by 100 and rounded to the nearest tenth.

- Ending stocks are aggregated from ending stocks in thousand barrels in Table 2.

**Note 9.4 Distillate and Residual Fuel Oil Supply and Disposition** statistics on the referenced lines appear in Table 4 of the "Detailed Statistics," except where noted.

- Total Production is the sum of Field Production and Refinery Production in Table 4.

- Imports, Stock Withdrawal (+) or Addition (-), Exports, and Product Supplied appear as labeled in Table 4.

- Ending stocks appear in thousand barrels in Table 2.

**Note 9.5 Liquefied Petroleum Gases Supply and Disposition** statistics represent the aggregation of statistics on ethane, ethylene, propane, propylene, butane, butylene, and isobutane. The statistics on the referenced line appear in Table 4 of the "Detailed Statistics," except where noted.

- Total Production is the sum of Field Production and Refinery Production in Table 4.

- Imports, Stocks Withdrawal (+) or Addition (-), Refinery Inputs, Exports, and Product Supplied appear as labeled in Table 4.

- Ending stocks appear in thousand barrels in Table 2.

**Note 9.6 Other Petroleum Products Supply and Disposition** statistics represent the aggregation of statistics on pentanes plus, other liquids, and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil, and liquefied petroleum gases. The statistics on the referenced line are aggregated from Table 4 of the "Detailed Statistics," except where noted.

- Total production is the aggregated sum of Field Production and Refinery Production in Table 4.

- Imports, Stock Withdrawal (+) or Addition (-), Refinery Inputs, Exports, and Product Supplied are aggregated from Table 4.

- Ending stocks are aggregated from ending stocks in thousand barrels in Table 2.

**Note 9.7 Table 1. U.S. Petroleum Balance**

- Lines (1) through (3): Crude oil (including lease condensate) production for *Alaska, Lower 48 States*, and *Total U.S.* are calculated by calling the conservation agency in Alaska for Alaskan crude oil production during the month, estimating crude oil production in the United States (see Explanatory Note 3), and taking the difference to equal production in the Lower 48 States.

- Line (5): *SPR Imports* are reported on survey Form EIA-814.

- Line (12): *Total Other Sources* equals crude oil stock withdrawal (+) or addition (-) plus unaccounted for crude oil minus crude oil losses minus crude oil product supplied in Table 2.

- Line (14): Natural Gas Plant Liquids (NGPL) *Field Production* equals field production of natural gas liquids (NGL) plus field production of finished petroleum products in Table 2.

- Line (15): NGPL *Net Imports* equals the sum of the imports of pentanes plus minus the exports of pentanes plus in Table 2.

- Line (16): NGPL *Stock Withdrawal (+) or Addition (-)* is equal to the stock withdrawal (+) or addition (-) of pentanes plus in Table 2.

- Line (17): *Total NGPL Supply* equals the sum of lines (14), (15), and (16).

- Line (18): Other Liquids *Stock Withdrawal (+) or Addition (-)* equals the aggregate stock withdrawal (+) or addition (-) for other hydrocarbons and alcohol, unfinished oils, motor gasoline blending components, and aviation gasoline blending components in Table 2.

- Line (20): *Other Hydrocarbons and Alcohol New Supply* equals the field production of same in Table 2.

- Line (21): *Refinery Processing Gain* is a balancing item equal to total refinery production minus total refinery input in Table 2.

- Line (23): *Total Other Liquids* equals the sum of lines (18) through (22).

- Line (24): *Total Production of Products* equals crude oil input to refineries plus field production of natural gas

liquids and LRG and finished petroleum products; plus imports of pentanes plus; plus stock withdrawal (+) or addition (-) of pentanes plus; plus stock withdrawal (+) or addition (-) of other liquids; plus imports of other liquids; plus field production of other liquids; plus total refinery production; minus total refinery input; plus crude oil product supplied in Table 2.

- Line (25): *Gross Imports* of Refined Products equals imports of LPG plus imports of finished petroleum products in Table 2.
- Line (26): *Exports* of Refined Products equals exports of LPG plus exports of finished petroleum products in Table 2.
- Line (27): *Net Imports* of Refined Products equals the difference between lines (25) and (26).
- Line (28): *Total New Supply of Products* equals crude oil input to refineries plus field production of natural gas liquids and LRG and finished petroleum products; plus imports of pentanes plus; plus stock withdrawal (+) or addition (-) of pentanes plus; plus stock withdrawal (+) or addition (-) of other liquids; plus imports of other liquids; plus total field production of other liquids; plus total refinery production; minus total refinery input; minus crude oil product supplied plus imports of LPG and finished petroleum products; minus exports of LPG and finished petroleum products in Table 2.
- Line (29): *Refined Products Stock Withdrawal (+) or Addition (-)* equals the sum of stock withdrawal (+) or addition (-) for LPG and finished petroleum products in Table 2.
- Line (30): *Total Petroleum Products Supplied for Domestic Use* equals total products supplied in Table 2.
- Lines (31) through (34): Equal the respective products supplied in Table 2.
- Line (35): *Other Products Supplied* equals the sum of pentanes plus, aviation gasoline, naphtha-type jet fuel, kerosene-type jet fuel, naphtha <400 Deg. F. for petrochemical feedstock use, other oils >400 Deg. F. for petrochemical feedstock use, special naphthas, lubricants, waxes, petroleum coke, asphalt and road oil, still gas, unfinished oils, motor gasoline blending components, aviation gasoline blending components, and miscellaneous products supplied in Table 2.
- Line (37): *Total Product Supplied* is equal to total products supplied in Table 2.
- The sum of lines (38) and (39): Stocks of *Crude Oil and Lease Condensate (Excluding SPR)* and stocks held by the *Strategic Petroleum Reserve* equals ending stocks of crude oil in Table 2.
- Line (43): Stocks of *Finished Refined Products* equals the sum of liquefied petroleum gases and finished petroleum products stocks in Table 2.

## Note 10: New Stock Basis

In January 1975, 1981, and 1983, numerous respondents were added to bulk terminal and pipeline surveys affecting subsequent stocks reported and stock withdrawal calculations. Using the expanded coverage (new basis), the end-of-year stocks, in million barrels, would have been:

- Crude Oil: 1982 - 645 (Total) and 351 (Other Primary).
- Crude Oil and Petroleum Products: 1974 - 1,121; 1980 - 1,425; and 1982 - 1,462.
- Motor Gasoline: 1974 - 225; 1980 - 263; 1982 - 244 (Total) and 203 (Finished).
- Distillate Fuel Oil: 1974 - 224; 1980 - 205; and 1982 - 186.
- Residual Fuel Oil: 1974 - 75; 1980 - 91; and 1982 - 68.
- Liquefied Petroleum Gases: 1974 - 113; 1980 - 128; and 1982 - 103.
- Other Petroleum Products: 1974 - 220; 1980 - 249; and 1982 - 259.
- Stock withdrawal calculations beginning in 1975, 1981, and 1983 were made using new basis stock levels.

In January 1984, changes were made in the reporting of natural gas liquids. As a result, unfractionated stream, which was formerly included in "Other Petroleum Products Supply and Disposition" table in the "Summary Statistics," is now reported on a component basis (ethane, propane, normal butane, isobutane, and pentanes plus). Most of these stocks will now appear in the "Liquefied Petroleum Gases Supply and Disposition" table of the "Summary Statistics." This change will affect stocks reported and stock withdrawals in each table. Under the new basis, end-of-year 1983 stocks, in million barrels, would have been:

- Liquefied Petroleum Gases: 1983 - 108.
- Other Petroleum Products: 1983 - 248.

## Note 11: Stocks of Alaskan Crude Oil

Stocks of Alaskan crude oil in-transit were included for the first time in January 1981. The major impact of this change is on the reporting of stock withdrawal calculations. Using the expanded coverage (new basis), 1980 end-of-year stocks, in million barrels, would have been 488 (Total) and 380 (Other Primary).

## Note 12: 1981 Changes in Petroleum Industry Reporting

Petroleum statistics contained in this report for all years through 1980 were developed using definitions, concepts, reporting procedures, and aggregation methods that are consistent with those developed by the U.S. Bureau of Mines. Research conducted by the Energy Information Administration in 1979 and 1980 indicated that changes had occurred in the petroleum industry that were not being adequately reflected in EIA's reporting system.

EIA reporting forms, definitions, and procedures were modified beginning in January 1981 to describe industry operations more accurately. Unfortunately, empirical information is not available to precisely measure the data shortcomings through 1980. However, estimates of the magnitudes of differences in the major data series are described below to form a basis for comparing 1979, 1980, and 1981 data.

### Motor Gasoline

Prior to 1979, the EIA product-supplied series for motor gasoline was consistently about 2 percent lower than the Federal Highway Administration (FHWA) gasoline-sales data series, which is derived from State tax receipts. The difference increased to about 3 percent in 1979 and 1980. There were two primary causes for this growing difference. First, refinery operations, particularly the flows of unfinished oils and the redesignation of some finished products, were not being accurately described on the EIA survey forms. Second, a large amount of gasoline was being produced away from refineries at "downstream blending stations" to take advantage of provisions in regulations governing the amount of lead that could be added. These blending stations were not reporting gasoline production to the EIA until the data system was changed in January 1981.

Quantitative estimates of the magnitude of the difference in EIA's gasoline product supplied data in 1979 and 1980 have been made by the EIA and the American Petroleum Institute (API). The following table provides 1979 and 1980 data as published in the *Petroleum Statement, Annual*, as well as EIA and API estimates of "recast" motor gasoline product supplied.

EIA recast estimates were based upon preliminary monthly information in the *Monthly Petroleum Statement*. The ranges displayed in the EIA column reflect uncertainty in the estimates. Also shown are the FHWA motor gasoline sales statistics for those years.

### Table B2. Finished Motor Gasoline Product Supplied
(Thousand Barrels per Day)

| | EIA Reported | API Recast | EIA Recast | FHWA[1] |
|---|---|---|---|---|
| 1979 ..... | 7,034 | 7,302 | 7,183-7,347 | 7,258 |
| 1980 ..... | 6,579 | 6,882 | 6,806-6,889 | 6,792 |

[1] FHWA gasoline statistics based on data from Federal Highway Administration, Estimate of Total Gasoline Use, Table MF-21A published October 1980 and September 1981. Aviation gasoline (Table MF-24) has been subtracted from FHWA product supplied quantities to make data comparable.

### Distillate and Residual Fuel Oil

Distillate and residual fuel oil refinery production statistics through 1980 were adjusted to account for an imbalance between unfinished oil supply and disposition. The reported quantities of refinery inputs of unfinished oils typically exceed the available supply of unfinished oils. It has been assumed that this occurs when distillate and residual fuel oils produced by a refinery are shipped to another refinery, where it is treated as unfinished oil. This oil is then reprocessed rather than used or sold as distillate or residual fuel oil.

For many years (including 1980), the difference between unfinished oil disposition and supply was subtracted from distillate and residual fuel oil production to adjust for this discrepancy. Two-thirds of the difference was applied to distillate, and one-third to residual fuel oil.

Beginning in January 1981, this adjustment was discontinued because there was not sufficient empirical evidence to support it. The following table presents distillate and residual fuel oil refinery production in 1979 and 1980 as published (adjusted) and on the same basis as 1981 statistics (unadjusted) to permit comparison.

Adjusted distillate and residual fuel oil product supplied volumes differ from the unadjusted volumes by the same amounts as the adjusted and unadjusted production volumes.

## Table B3. Distillate and Residual Fuel Oil Production and Product Supplied
(Thousand Barrels per Day)

| | Adjusted Refinery Production | Unadjusted Refinery Production | Difference | Unadjusted Product Supplied |
|---|---|---|---|---|
| Distillate Fuel Oil | | | | |
| 1979 ............ | 3,152 | 3,169 | 16 | 3,327 |
| 1980 ............ | 2,661 | 2,764 | 103 | 2,969 |
| Residual Fuel Oil | | | | |
| 1979 ............ | 1,687 | 1,695 | 8 | 2,834 |
| 1980 ............ | 1,580 | 1,634 | 54 | 2,562 |

### Total Petroleum Products

The imbalance between the supply and disposition of unfinished oils and gasoline blending components is included with other products (line 35) in the U.S. Petroleum Balance (Table 1). These imbalances are reported as negative product supplied in the Other Liquids section, Supply and Disposition Statistics (Table 2). Since these changes only involve redistribution of the volumes of gasoline, distillate and residual fuel oil, gasoline blending components, and unfinished oils, the total volume of petroleum products supplied remains unaffected by them.

## Note 13: Natural Gas Liquids Reporting Changes

Beginning in January 1984, a number of changes in the reporting of natural gas liquids (NGL) were implemented. The modified system reflects supply and disposition of NGL on a component, rather than product, basis.

From 1979 to 1983, the EIA collected and reported information on the supply and disposition of nine NGL products. Beginning with January 1984, NGL supply and disposition data were reported on a five component basis (see Table B4) to be consistent with record-keeping practices used by the industry. The following table shows the product category under the new and old basis. Four PSRS surveys were modified beginning in January 1984. They were:

EIA-810 *Monthly Refinery Report*
EIA-811 *Monthly Bulk Terminal Report*
EIA-812 *Monthly Product Pipeline Report*
EIA-816 *Monthly Natural Gas Liquids Report*

A fifth survey, the Form EIA-814, *Monthly Imports Report* (formerly Form ERA-60), was not modified. Adjustments are applied to NGL imports data to make them consistent with the revised reporting system (See Explanatory Note 14).

## Table B4. Product Basis vs. Component Basis Reporting

| | 1984 Component Basis | | | | |
|---|---|---|---|---|---|
| 1979-1983 Product Basis | Ethane | Propane | Normal Butane | Isobutane | Pentanes Plus |
| Ethane | • | | | | |
| Ethane-Propane Mixtures | • | • | | | |
| Propane | | • | | | |
| Butane-Propane Mixtures | | • | • | | |
| Butane | | | • | | |
| Isobutane | | | | • | |
| Unfractionated Stream | • | • | • | • | • |
| Natural Gasoline and Isopentane | | | | | • |
| Plant Condensate | | | | | • |

## Note 14: NGL Import/Export Algorithms

Beginning in January 1984, the Energy Information Administration (EIA) implemented changes in the reporting of natural gas liquids (NGL) supply data, moving from a nine-product slate basis to a five-component slate basis that corresponds to industry record-keeping practices. Changes could not be made to the import and export systems. Therefore, in order to allocate imports and exports of mixed NGL streams to individual component parts, the EIA developed a statistical algorithm.

### Imports

The imports algorithm is based on information gathered from the larger importers of NGL, who were asked to provide component analysis of the products they imported during the first six months of 1983. The percentages shown in the following table are derived from the weighted averages of the data provided by the importers.

### Exports

The export algorithm is based on information gathered from the larger exporters of NGL, who were asked to provide component analysis of the products they exported during 1983. The percentages shown in the following table are derived from the weighted averages of the data provided by the exporters. It was necessary to derive percentages by

**Table B5. Algorithm for Allocating NGL Imports/Exports**
(Percent)

| | EIA Component Slate | | | | |
|---|---|---|---|---|---|
| | Ethane | Propane | Normal Butane | Isobutane | Pentanes Plus |
| Import Product | | | | | |
| Natural Gasoline An Isopentane (EIA-814) | -- | -- | -- | -- | 100 |
| Plant Condensate (EIA-814) | -- | -- | -- | -- | 100 |
| Ethane (IM-145) | 100 | -- | -- | -- | -- |
| Propane (IM-145) | -- | 100 | -- | -- | -- |
| Butane (IM-145) | -- | -- | 65 | 35 | -- |
| Butane-Propane Mixtures (IM-145) | -- | 40 | 35 | 20 | 5 |
| Ethane-Propane Mixtures (IM-145) | 60 | 40 | -- | -- | -- |
| Export Product | | | | | |
| Ethane (All PAD Districts) | 100 | -- | -- | -- | -- |
| Propane (All PAD Districts) | -- | 100 | -- | -- | -- |
| Butane (All PAD Districts) | -- | -- | 100 | -- | -- |
| Mixed Streams | | | | | |
| PAD Districts I, IV, V | -- | 40 | 60 | -- | -- |
| PAD District II | 30 | 25 | 15 | 15 | 15 |
| PAD District III | -- | 80 | 20 | -- | -- |

Petroleum Administration for Defense (PAD) Districts of exportation, due to the wide variation of components included in the mixed streams.

## Note 15: Addition of Crude Oil Pipeline Movements Data

Beginning in January 1985, inter-PAD District pipeline movements of crude oil were included in the PSM. Crude oil pipeline movements are used in the crude oil supply balance at the PAD District level but do not affect National level statistics. As a result of including these movements, *Net Receipts* of crude oil and *Unaccounted for Crude Oil* at the PAD District level changed significantly. Also affected were crude oil imports and unfinished oil imports at the PAD District level which are provided by *PAD District of entry* (Tables 6-10) and by *PAD District of processing* (Tables 16-19).

The tables in the PSM that were changed due to the inclusion of inter-PAD District pipeline movements of crude oil are listed below.

- Tables 6-10, "PAD District I to V, Supply and Disposition of Crude Oil and Petroleum Products." 1985 crude oil imports and unfinished oil imports in Tables 6 through 10 are now reported at the *PAD District of entry* rather than at the *PAD District of processing. Net Receipts* now include movements by pipeline as well as by tanker and barge.
- Table 26, "Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, and Barge Between PAD Districts." The crude oil line includes movements by pipeline as well as by tanker and barge.
- Table 27, "Movements of Crude Oil and Petroleum Products by Pipeline Between PAD Districts." A line was added to report crude oil movements.
- Table 29, "Net Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, and Barge Between PAD Districts." The crude oil line includes net movements by pipeline as well as by tanker and barge.

## Note 16: 1986 Changes in Petroleum Industry Reporting

Beginning in January 1986, several changes to the Petroleum Supply Reporting System (PSRS) went into effect. These changes affected the frame of operators of petroleum facilities required to complete the monthly surveys in the PSRS and resulted in some changes to the tables presented in the *Petroleum Supply Monthly* (PSM).

### Changes in Survey Frames

As a result of frames maintenance activities, 39 respondents were added to the monthly survey frames. The following table shows the impact of the data reported by the new respondents on published data for production and stocks of major petroleum products.

## Table B6. Impact of New Respondents to December 1985 PSM Data

| Product | Refinery Production (thousand barrels per day): Reported by New Respondents | Refinery Production (thousand barrels per day): Published U.S. Total | Stocks[1] (thousand barrels): Reported by New Respondents | Stocks[1] (thousand barrels): Published U.S. Total |
|---|---|---|---|---|
| Leaded Gasoline | 1.3 | 2,326 | 224 | 81,379 |
| Unleaded Gasoline | 0.6 | 4,323 | 276 | 108,422 |
| Distillate Fuel Oil | 0 | 3,174 | 1,217 | 143,911 |
| Residual Fuel Oil | 0 | 1,055 | 1,747 | 50,671 |
| NGL's & LRG's | 0 | 393 | 409 | 80,898 |
| Other Products | 0 | 3,302 | 1,413 | 239,158 |
| Crude Oil (excl. SPR) | -- | -- | 2,314 | 318,695 |

[1] Stocks as of December 31, 1985.

Also, beginning in January 1986, a major integrated petroleum company consolidated production and stocks reporting for some of its facilities. Data previously reported separately on Form EIA-811, *Monthly Bulk Terminal Report*, and on Form EIA-816, *Monthly Natural Gas Liquids Report* for two facilities have been combined with data reported for two refineries on Form EIA-810, *Monthly Refinery Report*. The primary impact of this reporting change is on Table 24, "Stocks of Crude Oil and Petroleum Products by PAD District," which will show a decrease in natural gas liquids (NGL) stocks at bulk terminals and natural gas processing plants, and an increase in NGL stocks at refineries.

### Changes in Publication Tables

Several changes have been made to tables in the PSM either as a direct result of changes in reporting requirements or to improve the usefulness of the publication. These changes are:

- Table 13, "Refinery Input of Crude Oil and Petroleum Products by PAD District"

  - Alaskan crude oil receipts are now shown separately.

- Table 14, "Refinery Production of Petroleum Products by PAD District"

  - The "petrochemical feedstock use" and "other use" are no longer shown separately for still gas or for liquefied refinery gases.

- Tables 16 and 17, "Imports of Crude Oil and Petroleum Products by PAD District"

  - Imports of unfinished oils are now separated into four categories: naphthas and lighter, kerosene and light gas oils, heavy gas oils, and residuum.

- Tables 18 and 19, "Imports of Crude Oil and Petroleum Products by Source"

  - Countries formerly included in the categories "Other Western Hemisphere" and "Other Eastern Hemisphere" are shown individually.

- Table 24, "Stocks of Crude Oil and Petroleum Products by PAD District"

  - The breakout between "petrochemical feedstock use" and "other use" for each liquefied petroleum gas was eliminated.

## Note 17: 1987 Changes in the Petroleum Supply Reporting System

Several changes to the Petroleum Supply Reporting System went into effect at the beginning of January 1987. These changes were made as part of the Energy Information Administration's (EIA's) continuing effort to provide pertinent, timely and consistent energy information.

### Changes in Data Collection and Reporting Systems

- Fresh feed input to catalytic cracking units, hydrocracking units and cokers were added to the Form EIA-810, *Monthly Refinery Report*.

### Changes in Publications

- The "Appalachian No. 2" Refining District has been combined with the "Indiana, Illinois, Kentucky," Refining District. This affectsPSM Tables 12-15, 24, 30, and 31.

- Fresh feed inputs to catalytic cracking units, hydrocracking units and cokers are included in Table 13, "Refinery Input of Crude Oil and Petroleum Products by PAD District."

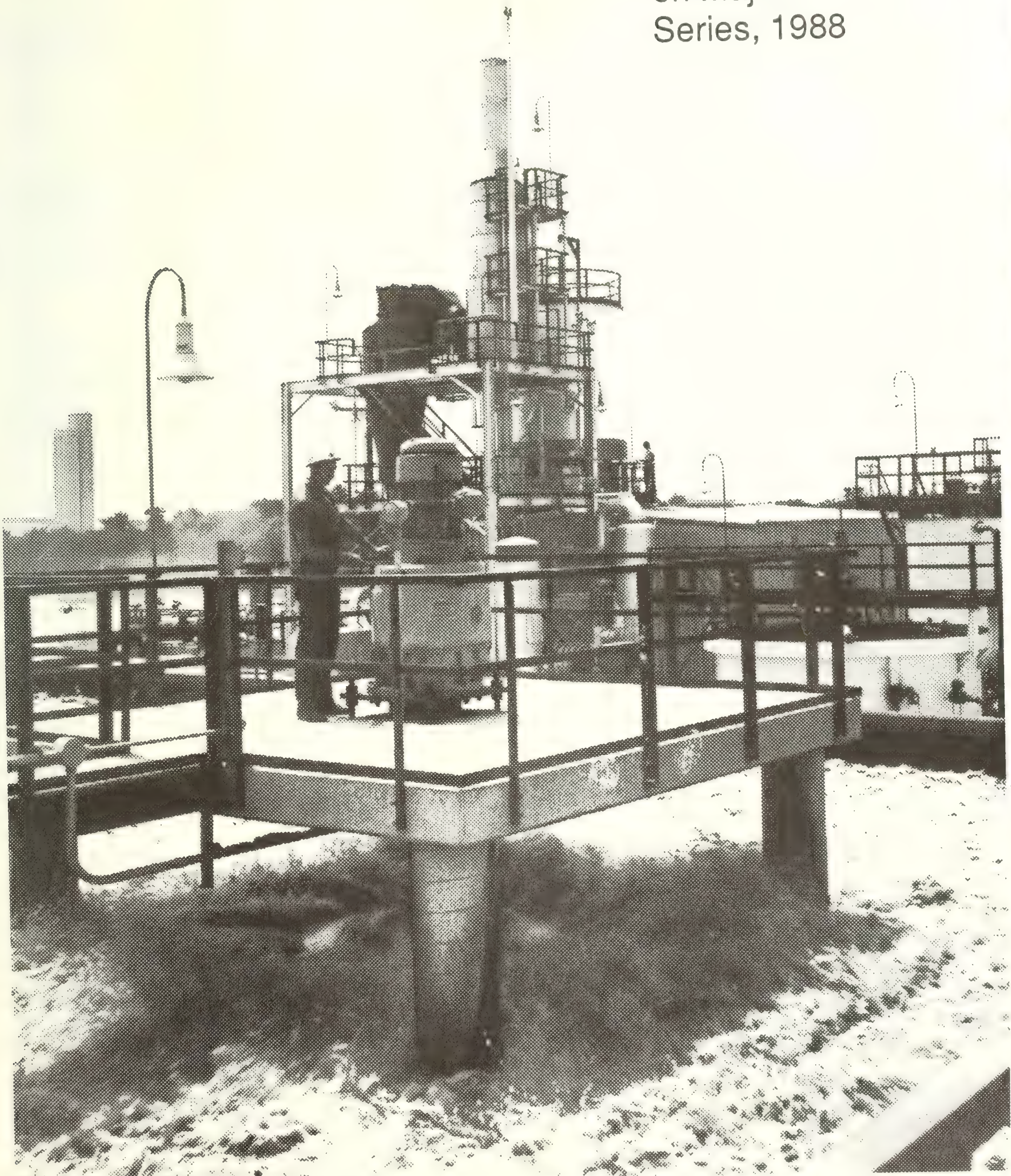
## larification

1986, several refineries and terminals in the United States pplied for Foreign Trade Zone (FTZ) status and applications om three refineries were approved. Consequently, during 1986, some refineries with FTZ status were treated as if they were within the United States while the Hawaiian FTZ was considered outside.

- Effective with the January 1987 data, all Foreign Trade Zone facilities located within the 50 United States are considered domestic entities and are included in statistics in the PSM. The principal differences in the PSM data series are about a 1 percent increase in crude oil imports and a 3 percent decrease in product imports.

# Appendix C

## Impact of Resubmissions on Major Series, 1988



*Surface aerators are used at U.S. petroleum refineries to help prevent water pollution. These aerators speed up the oxidation process by beating air into water.*

# Appendix C

## Table C1. Impact of Resubmissions on Major Series, 1988
(Thousand Barrels per Day, Except Where Noted)

| Product | January | | February | | March | | April | | May | | June | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PSM Value | Difference | PSM Value | Difference | PSM Value | Difference | PSM Value | Difference | PSM Value | Difference | PSM Value | Difference |
| **Inputs** | | | | | | | | | | | | |
| Crude Oil | 12,975 | 2 | 12,715 | -22 | 13,072 | -7 | 13,167 | (s) | 13,472 | -4 | 13,528 | 4 |
| LPG's | 366 | -7 | 336 | 7 | 266 | 2 | 256 | 0 | 253 | 2 | 234 | -1 |
| **Production** | | | | | | | | | | | | |
| LPG's | 1,723 | 8 | 1,757 | 11 | 1,802 | 15 | 1,796 | 8 | 1,809 | 5 | 1,804 | 4 |
| Finished Motor Gasoline | 6,723 | 7 | 6,736 | (s) | 6,695 | 20 | 6,906 | 1 | 6,847 | 3 | 6,983 | 0 |
| Naphtha-Type Jet Fuel | 184 | (s) | 178 | (s) | 209 | 2 | 203 | 0 | 229 | (s) | 208 | 0 |
| Kerosene-Type Jet Fuel | 1,231 | 0 | 1,205 | 0 | 1,243 | -1 | 1,088 | 0 | 1,060 | -1 | 1,133 | 1 |
| Kerosene | 104 | 0 | 118 | (s) | 68 | (s) | 50 | 0 | 48 | 0 | 55 | 0 |
| Distillate Fuel Oil | 3,008 | 1 | 2,683 | -8 | 2,720 | -9 | 2,869 | 0 | 2,931 | 1 | 2,893 | (s) |
| Residual Fuel Oil | 1,009 | (s) | 997 | -5 | 944 | (s) | 951 | -2 | 866 | (s) | 881 | (s) |
| **Imports** | | | | | | | | | | | | |
| Crude Oil | 4,619 | 78 | 4,692 | 49 | 4,788 | 125 | 5,126 | 96 | 5,234 | 165 | 5,055 | 308 |
| Finished Motor Gasoline | 324 | 3 | 365 | 17 | 318 | 11 | 349 | 0 | 415 | 0 | 424 | -3 |
| Naphtha-Type Jet Fuel | 3 | 0 | 3 | 0 | 2 | 0 | 3 | 0 | 4 | 0 | 3 | 0 |
| Kerosene-Type Jet Fuel | 80 | 0 | 64 | 4 | 95 | 0 | 83 | -2 | 101 | 3 | 71 | 4 |
| Distillate Fuel Oil | 355 | 9 | 330 | 16 | 243 | 1 | 208 | 2 | 228 | 9 | 209 | 12 |
| Residual Fuel Oil | 737 | 34 | 792 | 71 | 610 | 30 | 465 | 19 | 423 | (s) | 349 | -25 |
| Other Products | 556 | 5 | 503 | 10 | 506 | 16 | 611 | 16 | 647 | 1 | 629 | 19 |
| **Stocks (Thousand Barrels)** | | | | | | | | | | | | |
| Crude Oil | 345,479 | 99 | 347,835 | 180 | 353,625 | 339 | 357,131 | 241 | 357,724 | 1,937 | 359,001 | -158 |
| Unfinished Oils | 95,338 | 615 | 97,786 | 692 | 102,134 | 309 | 102,847 | 224 | 112,069 | 173 | 114,952 | 433 |
| LPG's | 80,741 | -1,048 | 70,191 | 357 | 68,808 | 147 | 79,671 | 77 | 89,992 | 455 | 99,988 | 582 |
| Total Motor Gasoline | 239,464 | 518 | 240,661 | 475 | 231,258 | 293 | 225,956 | 601 | 225,644 | 370 | 208,969 | 856 |
| Naphtha-Type Jet Fuel | 8,366 | -760 | 6,731 | -681 | 7,156 | -524 | 6,713 | -442 | 7,397 | -568 | 6,750 | -13 |
| Kerosene-Type Jet Fuel | 37,912 | 47 | 36,889 | -22 | 39,548 | -37 | 39,270 | -60 | 39,392 | 63 | 38,990 | 24 |
| Distillate Fuel Oil | 127,155 | 396 | 109,640 | 122 | 89,312 | -86 | 94,290 | -49 | 104,452 | -324 | 110,662 | -305 |
| Residual Fuel Oil | 46,628 | 17 | 45,465 | 185 | 44,057 | 222 | 43,245 | 94 | 45,746 | 705 | 42,123 | 111 |
| **Product Supplied** | | | | | | | | | | | | |
| LPG's | 2,069 | 48 | 1,982 | -47 | 1,710 | 19 | 1,339 | 10 | 1,350 | -10 | 1,343 | 1 |
| Finished Motor Gasoline | 6,679 | -5 | 7,004 | 17 | 7,265 | 37 | 7,384 | -7 | 7,269 | 11 | 7,838 | -23 |
| Naphtha-Type Jet Fuel | 173 | 25 | 237 | -3 | 197 | -3 | 221 | -3 | 208 | 4 | 233 | -19 |
| Kerosene-Type Jet Fuel | 1,360 | -2 | 1,270 | 6 | 1,200 | (s) | 1,167 | -2 | 1,153 | -1 | 1,202 | 6 |
| Distillate Fuel Oil | 3,517 | -2 | 3,511 | 19 | 3,544 | -2 | 2,870 | 1 | 2,757 | 19 | 2,820 | 12 |
| Residual Fuel Oil | 1,578 | 34 | 1,601 | 60 | 1,434 | 29 | 1,272 | 21 | 945 | -19 | 1,102 | -5 |
| Major Products Supplied | 15,376 | 98 | 15,605 | 53 | 15,350 | 80 | 14,253 | 20 | 13,682 | 3 | 14,538 | -28 |

Note: Volumes indicate cumulative changes resulting from resubmissions received for that month as of the date of this publication.
(s) = Less than 500 barrels per day.

This table contains information on revisions to published statistics caused by resubmission of respondent survey forms. The table shows the published value in the *Petroleum Supply Monthly* (PSM) and the cumulative difference resulting from resubmissions for the major product series. The official published petroleum supply statistics are not changed to reflect revisions until publication of the *Petroleum Supply Annual* (PSA), except in cases of catastrophic error.

This table is provided as a service to analysts who need to know the latest available statistics. It should be used with caution because resubmissions are received on an irregular basis and the impact on published data can change from month to month. In some cases, the pattern of revision caused by resubmissions during the year is a poor indicator of final statistics that will be published in the PSA.

## Table C1. Impact of Resubmissions on Major Series, 1988 (Continued)
(Thousand Barrels per Day, Except Where Noted)

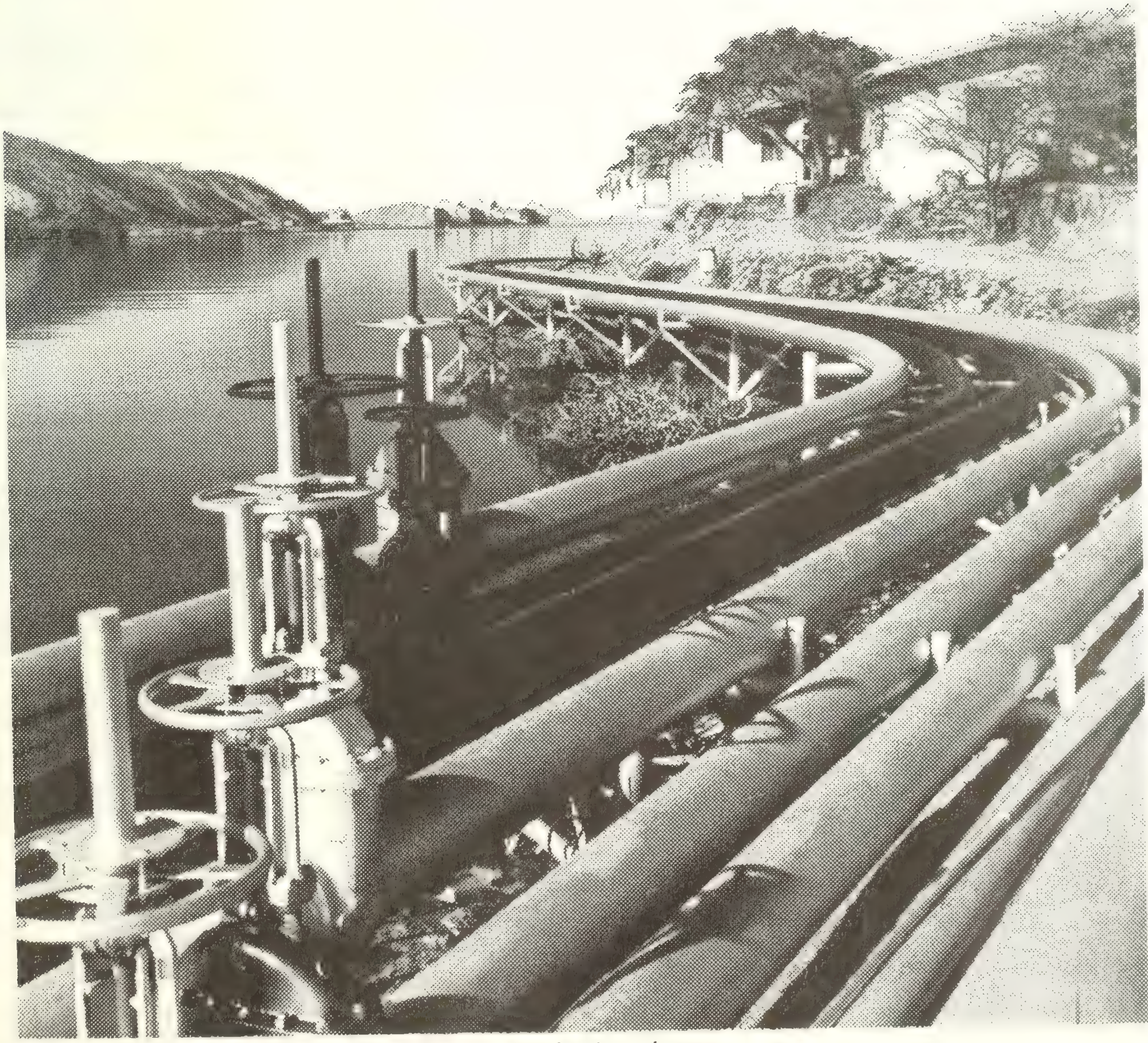
| | July | | August | | September | | October | | November | | December | | Year to Date |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Product | PSM Value | Difference | PSM Value | Difference | PSM Value | Difference | PSM Value | Difference | PSM Value | Difference | PSM Value | Difference | Avg Difference |
| **Inputs** | | | | | | | | | | | | | |
| Crude Oil | 13,663 | 1 | 13,797 | -2 | 13,309 | 5 | -- | -- | -- | -- | -- | -- | -2 |
| LPG's | 228 | 0 | 241 | (s) | 251 | 0 | -- | -- | -- | -- | -- | -- | 0 |
| **Production** | | | | | | | | | | | | | |
| LPG's | 1,831 | 4 | 1,848 | -4 | 1,837 | (s) | -- | -- | -- | -- | -- | -- | 5 |
| Finished Motor Gasoline | 7,159 | 0 | 7,204 | 5 | 6,948 | (s) | -- | -- | -- | -- | -- | -- | 4 |
| Naphtha-Type Jet Fuel | 209 | (s) | 206 | 0 | 198 | 0 | -- | -- | -- | -- | -- | -- | (s) |
| Kerosene-Type Jet Fuel | 1,155 | (s) | 1,138 | (s) | 1,178 | -1 | -- | -- | -- | -- | -- | -- | (s) |
| Kerosene | 64 | 0 | 81 | 0 | 78 | 2 | -- | -- | -- | -- | -- | -- | (s) |
| Distillate Fuel Oil | 2,783 | 1 | 2,844 | 4 | 2,779 | -1 | -- | -- | -- | -- | -- | -- | -1 |
| Residual Fuel Oil | 913 | (s) | 863 | 2 | 859 | 0 | -- | -- | -- | -- | -- | -- | -0 |
| **Imports** | | | | | | | | | | | | | |
| Crude Oil | 5,006 | 175 | 5,039 | 80 | 5,183 | 75 | -- | -- | -- | -- | -- | -- | 127 |
| Finished Motor Gasoline | 461 | 2 | 465 | 12 | 403 | -7 | -- | -- | -- | -- | -- | -- | 3 |
| Naphtha-Type Jet Fuel | 3 | 0 | 3 | 0 | 3 | 0 | -- | -- | -- | -- | -- | -- | 0 |
| Kerosene-Type Jet Fuel | 78 | 0 | 100 | 0 | 59 | (s) | -- | -- | -- | -- | -- | -- | 0 |
| Distillate Fuel Oil | 205 | 2 | 270 | 9 | 292 | 2 | -- | -- | -- | -- | -- | -- | 6 |
| Residual Fuel Oil | 436 | 34 | 515 | 17 | 566 | 10 | -- | -- | -- | -- | -- | -- | 21 |
| Other Products | 571 | 38 | 541 | -11 | 520 | (s) | -- | -- | -- | -- | -- | -- | 10 |
| **Stocks (Thousand Barrels)** | | | | | | | | | | | | | |
| Crude Oil | 349,330 | 155 | 333,170 | 389 | 328,448 | 107 | -- | -- | -- | -- | -- | -- | 365 |
| Unfinished Oils | 113,600 | 367 | 111,078 | 262 | 109,168 | -2 | -- | -- | -- | -- | -- | -- | 341 |
| LPG's | 111,906 | 926 | 120,611 | 1,127 | 121,620 | 797 | -- | -- | -- | -- | -- | -- | 380 |
| Total Motor Gasoline | 213,757 | 1,379 | 218,602 | 1,128 | 220,594 | 603 | -- | -- | -- | -- | -- | -- | 691 |
| Naphtha-Type Jet Fuel | 6,710 | 1 | 6,861 | 0 | 6,492 | 0 | -- | -- | -- | -- | -- | -- | -331 |
| Kerosene-Type Jet Fuel | 40,297 | 12 | 39,971 | 52 | 40,317 | 0 | -- | -- | -- | -- | -- | -- | 8 |
| Distillate Fuel Oil | 119,434 | 304 | 125,185 | 298 | 130,976 | 273 | -- | -- | -- | -- | -- | -- | 69 |
| Residual Fuel Oil | 41,072 | 76 | 37,840 | 312 | 44,220 | 431 | -- | -- | -- | -- | -- | -- | 239 |
| **Product Supplied** | | | | | | | | | | | | | |
| LPG's | 1,416 | -7 | 1,517 | -10 | 1,704 | 11 | -- | -- | -- | -- | -- | -- | 1 |
| Finished Motor Gasoline | 7,473 | -15 | 7,511 | 36 | 7,349 | 1 | -- | -- | -- | -- | -- | -- | 5 |
| Naphtha-Type Jet Fuel | 213 | (s) | 204 | (s) | 206 | 0 | -- | -- | -- | -- | -- | -- | (s) |
| Kerosene-Type Jet Fuel | 1,187 | (s) | 1,234 | -1 | 1,216 | 1 | -- | -- | -- | -- | -- | -- | 0 |
| Distillate Fuel Oil | 2,647 | -17 | 2,860 | 13 | 2,806 | 1 | -- | -- | -- | -- | -- | -- | 4 |
| Residual Fuel Oil | 1,177 | 35 | 1,258 | 12 | 1,112 | 6 | -- | -- | -- | -- | -- | -- | 19 |
| Major Products Supplied | 14,113 | -4 | 14,584 | 50 | 14,393 | 20 | -- | -- | -- | -- | -- | -- | 32 |

Note: Volumes indicate cumulative changes resulting from resubmissions received for that month as of the date of this publication.
(s) = Less than 500 barrels per day.

This table contains information on revisions to published statistics caused by resubmission of respondent survey forms. The table shows the published value in the *Petroleum Supply Monthly* (PSM) and the cumulative difference resulting from resubmissions for the major product series. The official published petroleum supply statistics are not changed to reflect revisions until publication of the *Petroleum Supply Annual* (PSA), except in cases of catastrophic error.

This table is provided as a service to analysts who need to know the latest available statistics. It should be used with caution because resubmissions are received on an irregular basis and the impact on published data can change from month to month. In some cases, the pattern of revision caused by resubmissions during the year is a poor indicator of final statistics that will be published in the PSA.

# Glossary



*Pipelines carry crude oil and petroleum products between refineries and ports.*

# Definitions of Petroleum Products and Other Terms

***Alcohol.*** The family name of a group of organic chemical compounds composed of carbon, hydrogen, and oxygen. The series of molecules vary in chain length and are composed of a hydrocarbon plus a hydroxyl group; CH-(CH)n-OH (e.g., methanol, ethanol, and tertiary butyl alcohol (TBA)).

***Alkylation.*** A refining process for chemically combining isobutane with olefin hydrocarbons (e.g., propylene, butylene) through the control of temperature and pressure in the presence of an acid catalyst, usually sulfuric acid or hydrofluoric acid. The product, alkylate, an isoparaffin, has high octane value and is blended with motor and aviation gasoline to improve the antiknock value of the fuel.

***API Gravity.*** An arbitrary scale expressing the gravity or density of liquid petroleum products. The measuring scale is calibrated in terms of degrees API; it may be calculated in terms of the following formula:

$$\text{Degrees API} = \frac{141.5}{sp.gr. 60\,°F/60\,°F} - 131.5$$

***Aromatics.*** Hydrocarbons characterized by unsaturated ring structures of carbon atoms. Commercial petroleum aromatics are benzene, toluene, and xylene (BTX).

***Asphalt.*** A dark-brown-to-black cement-like material containing bitumens as the predominant constituents, obtained by petroleum processing. The definition includes crude asphalt as well as the following finished products: cements, fluxes, the asphalt content of emulsions (exclusive of water), and petroleum distillates blended with asphalt to make cutback asphalts. The conversion factor for asphalt is 5.5 barrels of 42 U.S. gallons per short ton.

***ASTM.*** The acronym for the American Society for Testing and Materials.

***Aviation Gasoline (Finished).*** All special grades of gasoline for use in aviation reciprocating engines, as given in ASTM Specification D910 and Military Specification MIL-G-5572. Excludes blending components which will be used in blending or compounding into finished aviation gasoline.

***Aviation Gasoline Blending Components.*** Naphthas which will be used for blending or compounding into finished aviation gasoline (e.g., straight-run gasoline, alkylate, and reformate). Excludes oxygenates (alcohols, ethers), butane, and pentanes plus.

***Barrel.*** A volumetric unit of measure for crude oil and petroleum products equivalent to 42 U.S. gallons. This measure is used in most statistical reports. Factors for converting petroleum coke, asphalt, still gas and wax to barrels are given in the definitions of these products.

***Barrels Per Calendar Day.*** The maximum number of barrels of input that can be processed during a 24-hour period after making allowances for the following limitations:

> the capability of downstream facilities to absorb the output of crude oil processing facilities of a given refinery. No reduction is made when a planned distribution of intermediate streams through other than downstream facilities is part of a refinery's normal operation;
>
> the types and grades of inputs to be processed;
>
> the types and grades of products expected to be manufactured;
>
> the environmental constraints associated with refinery operations;
>
> the reduction of capacity for scheduled downtime such as routine inspection, mechanical problems, maintenance, repairs, and turnaround; and
>
> the reduction of capacity for unscheduled downtime such as mechanical problems, repairs, and slowdowns.

***Barrels Per Stream Day.*** The amount a unit can process running at full capacity under optimal crude oil and product slate conditions.

***Benzene.*** An aromatic hydrocarbon, (C6H6), present to a minor degree in most crude oils. Some important products manufactured from benzene are: styrene, phenol, nylon, aniline, and synthetic detergents.

***Butane.*** A normally gaseous straight-chain or branch-chain hydrocarbon, (C4H10). It is extracted from natural gas or refinery gas streams. It includes isobutane and normal butane and is designated in ASTM Specification D1835 and Gas Processors Association Specifications for commercial butane.

> ***Isobutane.*** A normally gaseous branch-chain hydrocarbon, (C4H10). It is a colorless paraffinic gas that boils at a temperature of 10.9 degrees F. It is extracted from natural gas or refinery gas streams.
>
> ***Normal Butane.*** A normally gaseous straight-chain hydrocarbon, (C4H10). It is a colorless paraffinic gas that boils at a temperature of 31.1 degrees F. It is extracted from natural gas or refinery gas streams.

***Butylene.*** An olefinic hydrocarbon, (C4H8), recovered from refinery processes.

***Catalytic Cracking.*** The refining process of breaking down the larger, heavier, and more complex hydrocarbon molecules into simpler and lighter molecules. Catalytic cracking is accomplished by the use of a catalytic agent and is an effective process for increasing the yield of gasoline from crude oil. Catalytic cracking processes fresh feeds and recycled feeds.

> ***Fresh Feeds.*** Crude oil or petroleum distillates which are being fed to processing units for the first time.
>
> ***Recycled Feeds.*** Feeds that are continuously fed back for additional processing.

***Catalytic Hydrocracking.*** A refining process that uses hydrogen and catalysts with relatively low temperatures and high pressures for converting middle boiling or residual material to high-octane gasoline, reformer charge stock, jet fuel and/or high grade fuel oil. The process uses one or more catalysts, depending upon product output, and can handle high sulfur feedstocks without prior desulfurization.

***Catalytic Hydrotreating.*** A refining process for treating petroleum fractions from atmospheric or vacuum distillation units (e.g., naphthas, middle distillates, reformer feeds, residual fuel oil, and heavy gas oil) and other petroleum (e.g., cat cracked naphtha, coker naphtha, gas oil, etc.) in the presence of catalysts and substantial quantities of hydrogen. Hydrotreating includes desulfurization, removal of substances (e.g., nitrogen compounds) that deactivate catalysts, conversion of olefins to paraffins to reduce gum formation in gasoline, and other processes to upgrade the quality of the fractions.

***Catalytic Reforming.*** A refining process using controlled heat and pressure with catalysts to rearrange certain hydrocarbon molecules, thereby converting paraffinic and naphthenic type hydrocarbons (e.g., low-octane gasoline boiling range fractions) into petrochemical feedstocks and higher octane stocks suitable for blending into finished gasoline. Catalytic reforming is reported in two categories. They are:

> ***Low Pressure.*** A processing unit operating at less than 225 pounds per square inch gauge (PSIG) measured at the outlet separator.
>
> ***High Pressure.*** A processing unit operating at either equal to or greater than 225 pounds per square inch gauge (PSIG) measured at the outlet separator.

***Charge Capacity.*** The input (feed) capacity of the refinery processing facilities.

***Coal.*** A generic term applied to carbonaceous rocks that were formed by the partial or complete decomposition of vegetation. These stratified carbonaceous rocks are either solid or brittle and are highly combustible. Includes lignite, bituminous coal, and anthracite which conform to ASTM Specification D388.

***Crude Distillation.*** The refining process of separating crude oil components at atmospheric pressure by heating to temperatures of about 600 degrees F to 750 degrees F (depending on the nature of the crude oil and desired products) and subsequent condensing of the fractions by cooling.

***Crude Oil (including Lease Condensate).*** A mixture of hydrocarbons that existed in liquid phase in underground reservoirs and remains liquid at atmospheric pressure after passing through surface-separating facilities. Included are lease condensate and liquid hydrocarbons produced from tar sands, gilsonite, and oil shale. Drip gases are also included, but topped crude oil (residual oil) and other unfinished oils are excluded. Liquids produced at natural gas processing plants and mixed with crude oil are likewise excluded where identifiable. Crude oil is considered as either domestic or foreign, according to the following:

> ***Domestic.*** Crude oil produced in the United States or from its "outer continental shelf" as defined in 43 USC 1331.
>
> ***Foreign.*** Crude oil produced outside the United States. Imported Athabasca hydrocarbons are included.

***Delayed Coking.*** A process by which heavier crude oil fractions can be thermally decomposed under conditions of elevated temperatures and pressure to produce a mixture of lighter oils and petroleum coke. The light oils can be processed further in other refinery units to meet product specifications. The coke can be used either as a fuel or in other applications such as the manufacturing of steel or aluminum.

***Distillate Fuel Oil.*** A general classification for one of the petroleum fractions produced in conventional distillation operations. It is used primarily for space heating, on-and-off-highway diesel engine fuel including railroad engine fuel and fuel for agricultural machinery), and electric power generation. Included are products known as No. 1, No. 2, and No. 4 fuel oils; No. 1, No. 2, and No. 4 diesel fuels.

***No. 1 Fuel Oil .*** A light distillate fuel oil intended for use in vaporizing pot-type burners. ASTM Specification D396 specifies for this grade maximum distillation temperatures of 400 degrees F at the 10-percent recovery point and 550 degrees F at the 90-percent point, and kinematic viscosities between 1.4 and 2.2 centistokes at 100 degrees F.

***No. 2 Fuel Oil.*** A distillate fuel oil for use in atomizing-type burners for domestic heating or for moderate capacity commercial-industrial burner units. ASTM Specification D396 designates minimum and maximum distillation temperatures at the 90-percent recovery point of 540 degrees F and 640 degrees F, and kinematic viscosities between 2.0 and 3.6 centistokes at 100 degrees F.

***No. 1 and No. 2 Diesel Fuel Oils.*** Distillate fuel oils used in compression-ignition engines, as designated in the ASTM Specification D975:

***No. 1-D.*** A volatile distillate fuel oil with a maximum distillation temperature of 550 degrees F at the 90-percent recovery point for use in high-speed diesel engines generally operated under variations in speed and load. Includes type C-B diesel fuel used for city buses and similar operations. Properties are defined in ASTM Specification D975.

***No. 2-D.*** A gas oil type distillate of lower volatility with minimum and maximum distillation temperatures at the 90-percent recovery point of 540 and 640 degrees F for use in high-speed diesel engines generally operated under uniform speed and load conditions. Includes Type R-R diesel fuel used for railroad locomotive engines, and Type T-T for diesel-engine trucks. Properties are defined in ASTM Specification D975.

***No. 4 Fuel Oil.*** A fuel oil for commercial burner installations not equipped with preheating facilities. It is used extensively in industrial plants. This grade is a blend of distillate fuel oil and residual fuel oil stocks that conforms to ASTM Specification D396 or Federal Specification VV-F-815C; with minimum and maximum kinematic viscosities between 5.8 and 26.4 centistokes at 100 degrees F. Also included is No. 4-D, a fuel oil for low and medium-speed diesel engines that conforms to ASTM Specification D975.

***Eastern Hemisphere.*** That half of the earth east of the Atlantic Ocean which includes Europe, Asia, Africa and Australia. The Hawaiian Foreign Trade Zone is in this hemisphere.

***Electricity (Purchased).*** Electricity purchased for refinery operations that is not produced within the refinery complex.

***Ethane.*** A normally gaseous straight-chain hydrocarbon, ($C2H6$). It is a colorless paraffinic gas that boils at a temperature of -127.48 degrees F. It is extracted from natural gas and refinery gas streams.

***Ether.*** A generic term applied to a group of organic chemical compounds composed of carbon, hydrogen, and oxygen, characterized by an oxygen atom attached to two carbon atoms (e.g., methyl tertiary butyl ether).

***Ethylene.*** An olefinic hydrocarbon, ($C2H4$), recovered from refinery processes or petrochemical processes.

***Exports.*** Shipments of goods from the 50 States and the District of Columbia to foreign countries, Puerto Rico, the Virgin Islands and other U.S. possessions and territories.

***Field Production.*** Represents crude oil production on leases, natural gas liquids production at natural gas processing plants, and new supply of other hydrocarbons and alcohol.

***Flexicoking.*** A thermal cracking process which converts heavy hydrocarbons such as crude oil, tar sands bitumen, and distillation residues into light hydrocarbons. Feedstocks can be any pumpable hydrocarbons including those containing high concentrations of sulfur and metals.

***Fluid Coking.*** A thermal cracking process utilizing the fluidized-solids technique to remove carbon (coke) for continuous conversion of heavy, low-grade oils into lighter products.

***Fuels Solvent Deasphalting.*** A refining process for removing asphalt compounds from petroleum fractions, such as reduced crude oil. The recovered stream from this process is used to produce fuel products.

***Gas Oil.*** A liquid petroleum distillate having a viscosity intermediate between that of kerosene and lubricating oil. It derives its name from having originally been used in the manufacture of illuminating gas. It is now used to produce distillate fuel oils and gasoline.

***Gasohol. See Motor Gasoline (Finished).***

***Gasoline Blending Components.*** Naphthas which will be used for blending or compounding into finished aviation or motor gasoline (e.g., straight-run gasoline, alkylate, and reformate). Excludes oxygenates (alcohols, ethers), butane, and pentanes plus.

***Heavy Gas Oil.*** Petroleum distillates with an approximate boiling range from 651 degrees F to 1000 degrees F.

***Hydrogen.*** The lightest of all gases, occurring chiefly in combination with oxygen in water; also in acids, bases, alcohols, petroleum, and other hydrocarbons.

***Idle Capacity.*** The component of operable capacity that is not in operation and not under active repair, but capable of being placed in operation within 30 days; and capacity not in operation but under active repair that can be completed within 90 days.

***Imported Crude Oil Burned As Fuel.*** The amount of foreign crude oil burned as a fuel oil, usually as residual fuel oil, without being processed as such. Imported crude oil burned as fuel includes lease condensate and liquid hydrocarbons produced from tar sand oil, gilsonite, and shale oil.

***Imports.*** Receipts of goods into the 50 States and the District of Columbia from foreign countries, Puerto Rico, the Virgin Islands, and other U.S. possessions and territories.

***Isobutane. See Butane.***

***Isohexane.*** A saturated branch-chain hydrocarbon, ($C_6H_{14}$). It is a colorless liquid that boils at a temperature of 156.2 degrees F.

***Isomerization.*** A refining process which alters the fundamental arrangement of atoms in the molecule without adding or removing anything from the original material. Used to convert normal butane into isobutane, ($C_4$), an alkylation process feedstock, and normal pentane and hexane into isopentane, ($C_5$), and isohexane, ($C_6$), high-octane gasoline components.

***Isopentane. See Natural Gasoline and Isopentane.***

***Kerosene.*** A petroleum distillate that has a maximum distillation temperature of 401 degrees F at the 10-percent recovery point, a final boiling point of 572 degrees F, and a minimum flash point of 100 degrees F. Included are the two grades designated in ASTM D3699: No. 1-K and No. 2-K, and all grades of kerosene called range or stove oil. Kerosene is used in space heaters, cook stoves, and water heaters and is suitable for use as an illuminant when burned in wick lamps.

***Kerosene-type Jet Fuel.*** A quality kerosene product with a maximum distillation temperature of 400 degrees F at the 10-percent recovery point and a final maximum boiling point of 572 degrees F. The fuel is designated in ASTM Specification D1655 and Military Specification MIL-T-5624L (Grades JP-5 and JP-8). A relatively low-freezing point distillate of the kerosene type used primarily for commercial turbojet and turboprop aircraft engines.

***Lease Condensate.*** A natural gas liquid recovered from gas well gas (associated and non-associated) in lease separators or natural gas field facilities. Lease condensate consists primarily of pentanes and heavier hydrocarbons.

***Light Gas Oils.*** Liquid petroleum distillates heavier than naphtha, with an approximate boiling range from 401 degrees F to 650 degrees F.

***Liquefied Petroleum Gases (LPG).*** Ethane, ethylene, propane, propylene, normal butane, butylene, and isobutane produced at refineries or natural gas processing plants, including plants that fractionate raw natural gas plant liquids.

***Liquefied Refinery Gases (LRG).*** Liquefied petroleum gases fractionated from refinery or still gases. Through compression and/or refrigeration, they are retained in the liquid state. The reported categories are ethane/ethylene, propane/propylene, normal butane butylene, and isobutane. Excludes still gas.

***Lubricating Oils.*** A substance used to reduce friction between bearing surfaces. Petroleum lubricants may be produced either from distillates or residues. Other substances may be added to impart or improve certain required properties. Do not include byproducts of lubricating oil refining such as aromatic extracts derived from solvent extraction or tars derived from deasphalting. "Lubricants"

includes all grades of lubricating oils from spindle oil to cylinder oil and those used in greases. The three categories include:

*Bright Stock.* A refined, high viscosity lubricating oil base stock that is usually made from a residuum by a treatment such as deasphalting, acid treatment, or solvent extraction.

*Neutral.* A distillate lubricating oil base stock with a viscosity that is usually not above 550 Saybolt Universal Seconds (SUS) at 100 degrees F. A product of hydrotreating, acid treatment, or solvent extraction.

*Other.* A lubricating oil base stock used in finished lubricating oils and greases, including black, coastal, and red oils.

*Middle Distillates.* A general classification that includes distillate fuel oil and kerosene.

*Miscellaneous Products.* Includes all finished products not classified elsewhere (e.g., petrolatum, lube refining byproducts (aromatic extracts and tars), absorption oils, ram-jet fuel, petroleum rocket fuels, synthetic natural gas feedstocks, speciality oils, and medicinal oils).

*Motor Gasoline (Finished).* A complex mixture of relatively volatile hydrocarbons, with or without small quantities of additives, that have been blended to form a fuel suitable for use in spark-ignition engines. Motor gasoline, as given in ASTM Specification D439 or Federal Specification VV-G-1690B, include a range in distillation temperatures from 122 to 158 degrees F at the 10-percent recovery point and from 365 to 374 degrees F at the 90-percent recovery point. The Reid Vapor Pressure ranges from 9 to 15 psi. "Motor gasoline" includes finished leaded gasoline, finished unleaded gasoline, and gasohol. Blendstock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

*Finished Leaded Gasoline.* Contains more than 0.05 gram of lead per gallon or more than 0.005 gram of phosphorus per gallon. Premium and regular grades are included, depending on the octane rating. Includes leaded gasohol. Blendstock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

*Finished Unleaded Gasoline.* Contains not more than 0.05 gram of lead per gallon and not more than 0.005 gram of phosphorus per gallon. Premium and regular grades are included, depending on the octane rating. Includes unleaded gasohol. Blendstock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

*Gasohol.* A blend of finished motor gasoline (leaded or unleaded) and alcohol (generally ethanol but sometimes methanol), limited to 10 percent by volume of alcohol.

*Motor Gasoline Blending Components.* Naphthas which will be used for blending or compounding into finished motor gasoline (e.g. straight-run gasoline, alkylate, and reformate). Excludes oxygenates (alcohols, ethers), butane, and pentanes plus.

*Naphtha.* A generic term applied to a petroleum fraction with an approximate boiling range between 122 and 400 degrees F.

*Naphtha-type Jet Fuel.* A fuel in the heavy naphtha boiling range. ASTM Specification D1655 specifies for this fuel maximum distillation temperatures of 290 degrees F at the 20-percent recovery point and 470 degrees F at the 90-percent point, meeting Military Specification MIL-T-5624L (Grade JP-4). JP-4 is used for turbojet and turboprop aircraft engines, primarily by the military. Excludes ram-jet and petroleum rocket fuels.

*Natural Gas.* A mixture of hydrocarbons and small quantities of various nonhydrocarbons existing in the gaseous phase or in solution with crude oil in underground reservoirs.

*Natural Gas Field Facility.* A field facility designed to process natural gas produced from more than one lease for the purpose of recovering condensate from a stream of natural gas; however, some field facilities are designed to recover propane, normal butane, pentanes plus, etc., and to control the quality of natural gas to be marketed.

*Natural Gas Plant Liquids.* Natural gas liquids recovered from natural gas in gas processing plants, and in some situations, from natural gas field facilities. Natural gas liquids extracted by fractionators are also included. These liquids are defined according to the published specifications of the Gas Processors Association and the American Society for Testing and Materials and are classified as follows: ethane, propane, normal butane, isobutane, pentanes plus, and other products from natural gas processing plants (i.e., products meeting the standards for finished petroleum products produced at natural gas processing plants, such as finished motor gasoline, finished aviation gasoline, special naphthas, kerosene, distillate fuel oil, and miscellaneous products).

*Natural Gas Processing Plant.* A gas processing plant is a facility designed (1) to achieve the recovery of natural gas liquids from the stream of natural gas which may or may not have been processed through lease separators and field facilities, and (2) to control the quality of the natural gas to be marketed. Cycling plants are classified as gas processing plants.

*Natural Gasoline and Isopentane.* A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas, that meets vapor pressure, end-point, and other specifications for natural gasoline set by the Gas Processors Association. Includes isopentane which is a saturated branch-chain hydrocarbon, ($C5H12$), obtained by fractionation of natural gasoline or isomerization of normal pentane.

*Normal Butane. See Butane.*

*OPEC.* The acronym for the Organization of Petroleum Exporting Countries, that have organized for the purpose of negotiating with oil companies on matters of oil production, prices and future concession rights. Current members are Algeria, Ecuador, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela.

*Operable Capacity.* The amount of capacity that, at the beginning of the period, is in operation; not in operation and not under active repair, but capable of being placed in operation within 30 days; or not in operation but under active repair that can be completed within 90 days. Operable capacity is the sum of the operating and idle capacity and is measured in barrels per calendar day or barrels per stream day.

*Operating Capacity.* The component of operable capacity that is in operation at the beginning of the period.

*Other Hydrocarbons.* Materials received by a refinery and consumed as a raw material. Includes hydrogen, coal tar derivatives, gilsonite, and natural gas received by the refinery for reforming into hydrogen. Natural gas to be used as fuel is excluded.

*Oxygenates.* Oxygenates include both alcohols and ethers used as octane boosting additives for gasoline (e.g., methyl tertiary butyl ether).

*Pentanes Plus.* A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas. Includes isopentane, natural gasoline, and plant condensate.

*Petrochemical Feedstocks.* Chemical feedstocks derived from petroleum principally for the manufacture of chemicals, synthetic rubber, and a variety of plastics. The categories reported are "Naphtha-Less than 400 degrees F" and "Other oils over 400 degrees F."

> *Naphtha-Less Than 400 Degrees F.* A naphtha with a boiling range of less than 400 degrees F that is intended for use as a petrochemical feedstock.
>
> *Other Oils-Over 400 Degrees F.* Oils with a boiling range of over 400 degrees F that is intended for use as a petrochemical feedstock.

*Petroleum Coke.* A residue, the final product of the condensation process in cracking. This product is reported as marketable coke or catalyst coke. The conversion factor is 5 barrels of 42 U.S. gallons per short ton.

> *Marketable Coke.* Those grades of coke produced in delayed or fluid cokers which may be recovered as relatively pure carbon. This "green" coke may be sold as is or further purified by calcining.
>
> *Catalyst Coke.* In many catalytic operations (e.g., catalytic cracking) carbon is deposited on the catalyst, thus deactivating the catalyst. The catalyst is reactivated by burning off the carbon, which is used as a fuel in the refining process. This carbon or coke is not recoverable in a concentrated form.

*Petroleum Products.* Petroleum products are obtained from the processing of crude oil (including lease condensate), natural gas, and other hydrocarbon compounds. Petroleum products include unfinished oils, liquefied petroleum gases, pentanes plus, aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, petrochemical feedstocks, special naphthas, lubricants, waxes, petroleum coke, asphalt, road oil, still gas, and miscellaneous products.

*Plant Condensate.* One of the natural gas liquids, mostly pentanes and heavier hydrocarbons, recovered and separated as liquids at gas inlet separators or scrubbers in processing plants.

*Primary Stocks.* Stocks of crude oil or petroleum products held in storage at (or in) leases, refineries, natural gas processing plant pipelines, tankfarms, and bulk terminals that can store at least 50,000 barrels of petroleum products or that can receive petroleum products by tanker, barge, or pipeline. Crude oil that is in-transit by water from Alaska, or that is stored on Federal leases or in the Strategic Petroleum Reserve is included. Primary Stocks exclude stocks of foreign origin that are held in bonded warehouse storage.

***Production Capacity.*** The amount of product that can be produced from processing facilities.

***Propane.*** A normally gaseous straight-chain hydrocarbon, ($C_3H_8$). It is a colorless paraffinic gas that boils at a temperature of -43.67 degrees F. It is extracted from natural gas or refinery gas streams. It includes all products designated in ASTM Specification D1835 and Gas Processors Association Specifications for commercial propane and HD-5 propane.

***Propylene.*** An olefinic hydrocarbon, ($C_3H_6$), recovered from refinery processes or petrochemical processes.

***Refinery.*** An installation that manufactures finished petroleum products from crude oil, unfinished oils, natural gas liquids, other hydrocarbons, and alcohol.

***Residual Fuel Oil.*** The topped crude of refinery operations which includes No. 5 and No. 6 fuel oils as defined in ASTM Specification D396 and Federal Specification VV-F-815C, Navy Special fuel oil as defined in Military Specification MIL-F-859E including Amendment 2 (NATO Symbol F-77), and Bunker C fuel oil. Residual fuel oil is used for the production of electric power, space heating, vessel bunkering, and various industrial purposes. Imports of residual fuel oil include "Imported Crude Oil Burned as Fuel."

***Residuum.*** Residue from crude oil after distilling off all but the heaviest components, with a boiling range greater than 1000 degrees F.

***Road Oil.*** Any heavy petroleum oil, including residual asphaltic oil used as a dust pallative and surface treatment on roads and highways. It is generally produced in six grades from 0, the most liquid, to 5, the most viscous.

***Shell Storage Capacity.*** The design capacity of a petroleum storage tank and is always greater than or equal to working storage capacity.

***Special Naphthas.*** All finished products within the naphtha boiling range that are used as paint thinners, cleaners, or solvents. These products are refined to a specified flash point. Special naphthas include all commercial hexane and cleaning solvents conforming to ASTM Specification D1836 and D484, respectively. Naphthas to be blended or marketed as motor gasoline or aviation gasoline, or that are to be used as petrochemical and synthetic natural gas (SNG) feedstocks are excluded.

***Steam (Purchased).*** Steam, purchased for use by a refinery, that was not generated from within the refinery complex.

***Still Gas (Refinery Gas).*** Any form or mixture of gases produced in refineries by distillation, cracking, reforming, and other processes. The principal constituents are methane, ethane, ethylene, normal butane, butylene, propane, propylene, etc. Still gas is used as a refinery fuel and a petrochemical feedstock. The conversion factor is 6.000 million Btu per barrel (42 U.S. gallons).

***Strategic Petroleum Reserve (SPR).*** Petroleum stocks maintained by the Federal Government for use during periods of major supply interruption.

***Sulfur.*** A nonmetallic element of lemon-yellow color, sometimes known as "brimstone."

***Thermal Cracking.*** A refining process in which heat and pressure are used to break down, rearrange, or combine hydrocarbon molecules. Thermal cracking includes gas oil, visbreaking, fluid coking, delayed coking, and other thermal cracking processes (e.g., flexicoking). See individual categories for definition.

***Toluene.*** An aromatic hydrocarbon, ($C_6H_5CH_3$), somewhat similar to benzene but of a higher boiling point produced in the coking of coal and also by petroleum refining processes. It is the basis of dyes, explosives, and aromatic compounds. Along with xylene, it is a key component in unleaded gasoline.

***Unfinished Oils.*** Includes all oils requiring further processing, except those requiring only mechanical blending. Includes naphthas, kerosene, light and heavy gas oils, and residuum. See individual categories for definition.

***Unfractionated Streams.*** Mixtures of unsegregated natural gas liquid components excluding those in plant condensate. This product is extracted from natural gas.

***United States.*** The United States is defined as the 50 States and the District of Columbia. U.S. exports include shipments to U.S. territories, and imports include receipts from U.S. territories.

***Vacuum Distillation.*** Distillation under reduced pressure (less the atmospheric) which lowers the boiling temperature of the liquid being distilled. This technique with its relatively low temperatures prevents cracking or decomposition of the charge stock.

***Visbreaking.*** A thermal process in which heavy atmospheric or vacuum-still bottoms are cracked at moderate temperatures to increase production of distillate products and reduce viscosity of the distillation residues.

*Wax.* A solid or semi-solid material derived from petroleum distillates or residues by such treatments as chilling, precipitating with a solvent, or de-oiling. It is light-colored, more-or-less translucent crystalline mass, slightly greasy to the touch, consisting of a mixture of solid hydrocarbons in which the paraffin series predominates. Includes all marketable wax whether crude scale or fully refined. The three grades included are microcrystalline, crystalline-fully refined, and crystalline-other. The conversion factor is 280 pounds per 42 U.S. gallons per barrel.

*Microcrystalline Wax.* Wax extracted from certain petroleum residues having a finer and less apparent crystalline structure than paraffin wax and having the following physical characteristics: Penetration at 77 degrees F (D1321)-60 maximum. Viscosity at 210 degrees F in Saybolt Universal Seconds (SUS). (D88)-60 SUS (10.22 centistokes) minimum to 150 SUS (31.8 centistokes) maximum. Oil content (D721)-5 percent minimum.

*Crystalline-Fully Refined Wax.* A light-colored paraffin wax having the following characteristics: Viscosity at 210 degrees F (D88)-59.9 SUS (10.18 centistokes) maximum. Oil content (D721)-0.5 percent maximum. Other +20 color, Saybolt minimum.

*Crystalline-Other Wax.* A paraffin wax having the following characteristics: Viscosity at 210 degrees F (D88)-59.9 SUS (10.18 centistokes) maximum. Oil content (D721)-0.51 percent minimum to 15 percent maximum.

*Western Hemishpere.* That half of the earth that includes North and South America and adjacent islands.

*Working Storage Capacity.* The volume between the maximum safe fill capacity and the quantity below which pump suction is ineffective (bottoms).

*Xylene.* An aromatic hydrocarbon, (C6H4Y(CH3)2), produced in petroleum refining (cracking) processes. One important use is as a solvent in the manufacture of paints. Along with toluene, it is a key ingredient in unleaded gasoline.

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